An Evaluation of Research on

Lymphoid Leukosis And Marek's Disease

Agricultural Research Service

United States Department of Agriculture

An Evaluation of Research
on Lymphoid Leukosis
and
Marek's Disease

June 1975

United States Department of Agriculture
Agricultural Research Service

Summary

Research by the Agricultural Research Service (ARS) on lymphoid leukosis and Marek's disease has been conducted since 1939 at the Regional Poultry Research Laboratory, East Lansing, Michigan, and concurrently at the Animal Physiology and Genetics Institute, Beltsville, Maryland, since 1967. As of July 1975, all research will be conducted in East Lansing.

As a direct result of ARS research, the causative virus of lymphoid leukosis was isolated and genetic resistance in chickens to this disease was shown. In 1967, the causative virus of Marek's disease was isolated, and in 1969, a herpesvirus isolated from turkeys (HVT) was shown to protect chickens against Marek's disease. Laboratory and field trials of the HVT vaccine were completed in 1970, and the vaccine was licensed for national use in 1971.

The cost of the research on lymphoid leukosis and Marek's disease to ARS was $6 million before 1965 and $9 million from 1966 to 1975. The total cost of the research, including ARS, CSRS, other federal and state funds, was $31 million. In 1974, the last full year, the cost was $2.16 million.

Benefits from the use of the herpesvirus of turkeys vaccine against Marek's disease included $91 million reduction in broiler condemnations, a $10 million reduction in broiler mortality, a $10 million reduction in feed necessary to produce broilers and a $17 million reduction in broiler breeder mortality. In egg-type chickens, benefits from the vaccine included a $67 million reduction in chicken mortality and a $350 million increase in egg production. The biologics industry benefited by $13 million. There was also a benefit of $58 million from decrease in lymphoid leukosis due to increasing the genetic resistance of commercial chickens to this disease. Other benefits include contribution to the knowledge of human cancer and a significant impact of the ARS research on other research in similar related fields.

By any measure, the investment in research on lymphoid leukosis and Marek's disease has paid off handsomely. Thus, the overall benefit was $616 million; the benefit in 1974 alone was $180 million. The benefit was derived from increased efficiency in broiler and egg production, which thus conserved feed and saved labor and capital. Some of the benefits were to the poultry and biologics industries, but the greatest benefit was to the consumer in the form of a more uniform, less expensive product than would have been available had the technology not been developed.

List of Committee Members

Dr. H. Graham Purchase, Chairman
Staff Scientist, NPS
BARC-West
Beltsville, Maryland

Dr. Ben R. Burmester
Research Leader
Regional Poultry Research Laboratory
3606 E. Mt. Hope Road
East Lansing, Michigan

Dr. R. V. Baumann
Agricultural Economics, PACS
Room 337A-USDA
Washington, D. C.

Dr. Lyman B. Crittenden
Animal Physiology & Genetics Institute
BARC-East
Beltsville, Maryland

Dr. L. R. Miller
Livestock & Veterinary Sciences, PACS
BARC-West
Beltsville, Maryland

Dr. R. L. Witter
Regional Poultry Research Laboratory
3606 E. Mt. Hope Road
East Lansing, Michigan

Acknowledgements

We acknowledge the assistance provided during preparation of this report by Dr. John E. Cochrane, Dr. E. L. Corley, Mrs. Fay Eggers, Dr. T. B. Kinney, Jr., Dr. E. J. Splitter and Mr. E. F. Schultz, Jr.

Table of Contents

Introduction

Departments and agencies of government are funded to carry out specified operations and functions judged to be in the public interest. The effectiveness and efficiency with which such missions are discharged are a legitimate concern of the public and their selected and appointed representatives. The President's Office of Management and Budget has directed that federal departments and agencies provide for continuing systematic review of all aspects of program management, including the evaluation of program effectiveness in accomplishing program objectives.

The Department of Agriculture has established a Program Evaluation System administered in the Office of Planning and Evaluation to assure that such evaluation is carried out. In its guidelines to the agencies, Office of Planning and Evaluation has defined program evaluation as the ex post facto evaluation of the effectiveness of ongoing programs in meeting the goals of USDA missions, achieving program objectives, and serving specified target groups. The purpose of this paper is to report the evaluation of a definable segment of ongoing Agricultural Research Service research, that on lymphoid leukosis and Marek's disease of poultry.

Historical Perspective

History

Mortality among laying chickens became a very pressing problem in commercial flocks throughout the United States from 1925 to 1937. This was a period when there was a very rapid growth in the commercial poultry industry. A large part of the mortality was attributed to one or more of the diseases included in what was later referred to as "the avian leukosis complex" (see section on Disease Nomenclature). In 1937, through the efforts of representatives of practically every segment of the poultry industry, poultry scientists and experiment station directors of the north central and northeastern states, the Regional Poultry Research Laboratory (hereafter referred to as the RPRL) was established. This laboratory was established under the Bankhead-Jones Act of 1935 which provided for the establishment of regional laboratories for special research administered by the Secretary of Agriculture in cooperation with the state experiment stations. The original building was dedicated on August 8, 1939.

The regional nature of the laboratory and its activity was further emphasized by the signing of a memorandum of agreement between the U.S. Department of Agriculture and 25 state agricultural experiment stations. Because of the special requirement for research within this disease complex, active participation by many of these experiment stations became gradually reduced until by World War II only a few experiment stations were actually working on the disease. The effort is currently almost entirely in the hands of this laboratory in the United States and the Houghton Poultry Research Station, Houghton, England.

Disease Nomenclature

In the 1920's and the 1930's, at the time the RPRL was established, "leukosis" was considered to be a neoplastic disease (cancer) of unknown etiology.

In the 1940's and 1950's the "avian leukosis complex" was thought to be caused by a single group of viruses and included neural, visceral, and ocular lymphomatosis. Genetic resistance to these diseases was recognized.

By the 1960's, the "avian leukosis complex" was recognized as two diseases: (a) lymphoid leukosis (LL) and its related tumors caused by groups of RNA tumor viruses, and (b) Marek's disease (MD) caused by DNA tumor viruses. (RNA viruses contain as their genetic material ribonucleic acid and DNA viruses contain deoxyribonucleic acid).

Now three groups of viruses are recognized, (a) and (b) above and the reticuloendotheliosis group of RNA viruses. Because of the similarity of lesions produced by these three groups of viruses, they are difficult to distinguish on a routine basis. Thus, the Animal and Plant Health Inspection Service, whose inspectors examine most poultry slaughtered for human consumption, condemn poultry carcasses showing any lesions of "leukosis." In broilers and young chickens this condemnation is entirely due to MD. In mature chickens condemnation is due to a mixture of LL and MD, but probably mostly the former. Reticuloendotheliosis occurs very rarely in poultry. Most of the research performed from 1965 to 1975 at the RPRL concerned MD. The herpesvirus of turkeys (hereafter referred to as HVT) vaccine was developed during this period and prevents mortality from MD and condemnations among young chickens from "leukosis."

Location of Work

By the early 1960's, workers recognized that the high rates of mortality and condemnations in the industry were largely due to MD, but the RPRL had worked largely on the causative agents of LL. In 1965 and 1966 the research here shifted almost entirely to that concerning MD, but it was recognized that mortality from LL remained a problem.

In 1967 work on genetic resistance to LL was moved to the Agricultural Research Center at Beltsville, Maryland, where it became part of the Genetics Investigations of the Poultry Research Branch and later part of the Avian Physiology Laboratory of the Animal Physiology and Genetics Institute. This phase of the work has continued at Beltsville in coordination with the RPRL until 1975.

By 1972 the HVT was in use as a commercial vaccine and part of the effort at the RPRL was shifted back to LL.

Later this year (1975), the Beltsville unit will move back to the RPRL to provide a better coordinated and balanced research program on the neoplastic diseases of poultry.

Objective of Research

Missions and Goals

Of the 11 missions describing the Department's role in solving broad national problems, the research under evaluation falls in the mission of "Agricultural Production and Marketing Efficiency." The USDA missions are currently defined in terms of 39 goals and 247 programs that contribute to the achievement of these goals. The research under evaluation falls under operating goal No. 2, "New Knowledge to Increase Productivity," and Program No. 678, "Animal Production Efficiency Research." The objectives of this program are to develop knowledge that will enable farmers to produce abundant dairy, meat, poultry, and other animal products at low cost to the consumer while obtaining desirable return on their investments through the use of (a) improved genetic characteristics; (b) improved reproduction efficiency; (c) greater control and prevention of disease, insects and other pests; (d) improved feeding and management practices; and (e) improved machinery, buildings, equipment, energy use efficiency, and related inputs.

Control of lymphoid leukosis (LL) and Marek's disease (MD) are under the objective of prevention of disease in poultry. With healthier and more productive animals, loss from disease will decrease and production efficiency will improve. Thus, the research clearly relates to the program, goal, and mission of the USDA of improving agricultural production efficiency, of which improving proultry efficiency is a part. With improved efficiency, food production in the world can be substantially increased. The increased food production is one approach to decreasing hunger in the world. Also, (36) "food can become an instrument of peace in international diplomacy." Thus, reduced losses in poultry from LL and MD are a small part in the attempt to reduce world hunger and maintain peace on earth.

This research is classified in the Current Research Information System under Research Problem Area 211 - Control of Diseases of Livestock, Poultry, and Other Animals.

Technological Objectives

The objectives of the research under evaluation were to reduce losses in poultry from mortality, morbidity, reduced egg production and condemnation after slaughter due to LL and MD.

The research program at the time the Regional Poultry Research Laboratory was started was in the areas of genetics, pathology, management, and nutrition. Genetics research included research to develop lines of chickens inherently resistant and susceptible to disease; to produce lines of chickens free of, yet highly susceptible to, the disease; and to determine whether the disease is transmitted from parent to offspring through hatching eggs. Pathology research included studies of the causative agent or agents and the methods of transmission, the passage and the maintenance of the agent(s), the gross

and microscopic study of diseased chickens, and a study of the physical and biological properties of the causative agent(s). Other research included the influence of environmental and nutritional factors, and of sex hormones and sex organs upon disease. Development of tests used in the diagnosis of the disease were pursued jointly with the Michigan State Agricultural Experiment Station with the financial assistance of the National Cancer Institute of the U.S. Public Health Service, Bethesda, Maryland.

In 1961 the research program was expanded to include the following: (a) breeding chickens for further genetic resistance or susceptibility; (b) determining the mode of inheritance of resistance; (c) developing and maintaining, for use in critical research, inbred lines of chickens that are not only highly susceptible but are free of leukosis and other diseases; (d) determining the biological and physical characteristics of the virus or viruses causing these diseases; (e) studying the pathology, immunology, and serology of the diseases to acquire a complete knowledge of host-response to infection; (f) developing methods, products, and instruments for the specific detection and assay of the tumor-producing agents and biologic reaction to these methods and procedures; (g) conducting epidemiological research for the purpose of contributing to a complete understanding of the diseases and developing measures for limiting the spread of infection; (h) developing methods, procedures, and agents for the control of these diseases; and (i) determining the effect of feeding certain nutrients on the incidence of visceral lymphomatosis. Although the emphasis on different areas has changed over the years, the USDA research program today remains essentially the same.

Cost of Research Program

The Agricultural Research Service (ARS) budget for research on lymphoid leukosis and Marek's disease was $8.555 million for the fiscal years 1966 to 1975 with an additional $0.572 million for extramural research (Table 1). In addition, $0.45 million was appropriated in 1962 for construction of a new laboratory which was completed in June 1973. The entire ARS budget for this research prior to 1966 was $5.93 million. Thus, in the 36 years ending June 1975, approximately $15.06 million was spent on ARS research on lymphoid leukosis and Marek's disease (Tables 1 and 19).

Expenditures for the 10 fiscal years 1966 to 1975 by the Cooperative States Research Service, Federal agencies other than USDA and state institutions are also listed in Table 1. The total support from all sources for the research amounted to $18.538 million for the 10 years 1966 to 1975. Expenditures from 1939, when the Regional Poultry Research Laboratory was established, to 1965 are estimated to be $5.93 million. This represents approximately 65% of the expenditure from 1966 to 1975. Assuming other sources expended a similar proportion, their expenditure for 1965 and earlier would be $6.11 million. When added to the budget for Cooperative States Research Service which was $2.20 million, to the budget for the states which

was $6.27 million, and to the other Federal expenditures which was $0.94 million, the total cost of the research was $30.58 million.

The total scientific man-years in ARS from 1966 to 1975 were 98 and for the state agricultural experiment stations 184 (Table 1).

Research Discoveries and Implementation of Results

Contribution of ARS Research to Objectives

Because of the great problem caused by lymphoid leukosis (LL) and Marek's disease (MD), many public and private institutions had small research programs to control these diseases. Also, involved was a large group of scientists interested in the causation and cure of human cancer.

Research organizations making significant contributions to the control of Marek's disease included the Regional Poultry Research Laboratory (RPRL), East Lansing, Michigan; the Houghton Poultry Research Station, Houghton, England; the Southeast Poultry Research Laboratory, Athens, Georgia; the University of Massachusetts, Amherst, Massachusetts; and Cornell University, Ithaca, New York. There was often close cooperation between the staffs at these institutions, and discoveries by one group were soon corroborated in other laboratories. The important events that led up to the development and use of the herpesvirus of turkeys (HVT) against MD are listed in Table 2. Contributions made by the ARS scientists are underlined. All are from the RPRL, East Lansing, Michigan. Separating the contribution of ARS scientists from those of other scientists is difficult. However, the major contributions of ARS scientists were in the discovery of the causative MD virus, the discovery of the HVT, the demonstration that HVT would protect against MD, and the laboratory and field trials that led to licensing of the vaccine for national use. Because all the major discoveries were made by ARS scientists and because the contribution of other groups was small and mainly in maintaining a level of competition, all the benefits from the HVT vaccine against MD are considered due to the discoveries by ARS scientists.

In LL research the laboratories mainly involved were the RPRL; the Animal Physiology and Genetics Institute, Beltsville, Maryland; and the Houghton Poultry Research Station, Houghton, England. A few members of the National Cancer Institute, National Institutes of Health, Bethesda, Maryland, were also involved in this research. In more recent years, some universities have become involved. The major pioneering discoveries from 1939 to 1965 were made by ARS scientists. These discoveries include the demonstration of the viral etiology of LL, the role of egg transmission in the disease, the identification of field strains of virus pathogenic for chickens and the demonstration that resistance of the chicken to infection by the virus was due to a single gene. In subsequent years, from 1965 to 1975, some discoveries have been made solely by ARS scientists, e.g., the two levels of genetic resistance to LL and the pathogenicity of different subgroups of virus including endogenous virus. Other discoveries have been made in cooperation with state and other federal institutions, e.g., the role of the bursa of Fabricius in the pathogenesis of disease and the association of certain types of resistance with blood type. Still other discoveries have

been made by institutions supported by funds for human health; e.g., methods for assay of leukosis viruses, mutants of leukosis viruses, and studies of the nucleic acid of these viruses. Most of the contributions of ARS scientists have been directed toward resolving the LL problem in the poultry industry whereas contributions of scientists in the human health field were directed toward the basic causation of cancer. Thus, at least one-half of the benefits to the poultry industry from lymphoid leukosis research can be considered due to discoveries by ARS scientists.

Research Discoveries in Marek's Disease

The following list includes discoveries by ARS staff at the RPRL from 1965 to 1975. Each discovery was of significant information necessary before certain subsequent discoveries could be made.

1. Isolation of the causative herpesvirus of MD.
2. Development and standardization of methods for assay of the virus.
3. Development and production of a line of chickens highly susceptible to MD. Susceptible chickens are required for in vivo assay, vaccine challenge and pathogenesis studies.
4. Microscopic and ultrastructural changes of cells and cell cultures resulting from infection with the virus. Recognition of these changes is required for the in vitro assay of vaccine potency and many other studies.
5. Application of immunofluorescent technique for the detection and assay of MD virus (MDV) antigen and antibody.
6. Discovery of virus production in the feather follicle.
7. Detection, assay and production of cell-free MDV and HVT.
8. Application of neutralization test and assessment of neutralizing antibodies.
9. Verification and study of essential parameters of the agar gel precipitin test of MDV antibody.
10. Attenuation of MDV and study of properties.
11. Studies in depth of the epizootiology of MD including spread between chickens and persistence in chickens.
12. Isolation of HVT.
13. Comparative antigenic studies of MDV and HVT.
14. Detection of surface antigens in cells infected with MDV.
15. Comparative study of the pathogenicity and antigenicity of virus clones from strains of MDV and HVT.
16. Absence of egg transmission of MDV.
17. Laboratory protection and safety tests of HVT in chickens and in humans.
18. Effect of vaccination with HVT on the horizontal spread of MDV.
19. Large scale production of MDV.
20. Susceptibility of cell cultures of various avian species to MDV and HVT.
21. Temporal relations between HVT vaccination and challenge with MDV.
22. Storage of HVT vaccine.
23. Lack of oncogenicity of HVT for turkeys.
24. Mechanism of protection of HVT against MD.

Research Discoveries in Lymphoid Leukosis

The following list includes discoveries made from the time the RPRL was established until now (1975). They include those made by scientists at the Animal Physiology and Genetics Institute, Beltsville, Maryland. The discoveries made by ARS scientists are indicated by (ARS).

1. Recognition of LL as a viral disease (ARS).
2. Demonstration of egg transmission of the LL virus (LLV) (ARS).
3. Demonstration of contact transmission of the virus (ARS).
4. Development of cell culture assay systems for the LLV (Univ. of Calif.).
5. Identification of single genes controlling cellular resistance to LLV infection (ARS).
6. Demonstration that "field" strains and "laboratory" strains of LLV are similar agents (ARS).
7. Recognition of the close association of LL viruses with sarcoma viruses (ARS, Univ. of Calif.).
8. Recognition of the group-specific antigen of the LLV, and development of the complement fixation for avian leukosis viruses (COFAL) test (National Institutes of Health).
9. Recognition that genetic resistance to LL can be aimed at resistance to virus infection or at tumor development (ARS).
10. Classification of LLV into subgroups (Univ. of Calif.).
11. Demonstration that genetic cellular resistance reduces the incidence of neutralizing antibody and disease (ARS).
12. Identification of the bursa of Fabricius as the target organ for the initial lymphoid tumor transformation (ARS, Univ. of Minn.).
13. Demonstration of single genes for resistance, each of which are specific for a different subgroup of LLV's (ARS, England).
14. Identification of a single dominant gene controlling the expression of LLV group-specific antigen in the absence of virus (England).
15. Development of the non-producing cell test for LLV (ARS).
16. Demonstration that a single gene for virus resistance is associated with a blood group gene (ARS).
17. Recognition of the spontaneous production of the endogenous LLV (RAV-0) (Univ. of Calif.).
18. Demonstration of high-frequency recombination in the leukosis-sarcoma group of viruses, leading to studies of virus genetics and understanding of viral functions (Univ. of Wash. & Public Health Research Institute, New York).
19. Identification of dominant genes controlling spontaneous RAV-0 production (ARS).
20. Demonstration that all subgroups of LLV tested induce LL except the viruses related to the endogenous LLV (RAV-0). This discovery indicates that the control of endogenous virus is not important to the poultry industry (ARS).
21. Development of the phenotypic mixing test for assay of LLV's (ARS).

Implementation of Results

The time between the development of the HVT vaccine against Marek's disease as a commercially applicable vaccine and its adoption by 95% of the industry was 2 years (36), a time much shorter than that required to adopt many other agricultural discoveries, some of which have required one or more decades (Table 3). Also, the time between the discovery of HVT and the licensing of it as a vaccine was approximately 2 years, an exceptionally short time to demonstrate safety and efficacy for commercial use. The speed with which commercial companies obtained approval to use the vaccine and the speed of adoption was due in large part to the extent and thoroughness of the research at the RPRL. Without these experimental results, the time needed for licensing and adoption would have been much longer.

The causative agent of LL was discovered in the early 1950's and a cell culture test for detection of the virus was discovered in the 1960's. These discoveries led directly to the requirement by Federal regulatory agencies that all vaccines for human and animal use that are grown in chicken eggs be free of LLV's. A number of lines of LLV-free chickens whose eggs are used for vaccine production and research purposes have been developed. At least three large breeders of egg-type chickens have progressed or are progressing towards making their basic lines free of these viruses. However, the technology has not been universally adopted, mainly because of the high cost of testing, the disruption of the breeding programs required for development of LLV-free flocks, and the lack of knowledge of the importance of LL to the commercial industry. Some progress has been made in breeding chickens for genetic resistance. The time between the discovery of genetic resistance in chickens and its implementation by some breeders was about 7 years. This implementation never attained wide acceptance because breeders were generally unwilling to add another trait to their breeding objectives. Breeding for genetic resistance to LL is continuing in some companies.

Benefit from Research Program

Estimation of Losses from LL and MD.

Actual losses from LL and MD for 1965 are listed in Table 4. The losses from MD condemnation visualized for 1975, had new technology not been applied, are average losses prevailing just prior to beginning use of the vaccine in 1971. Thus, in the case of condemnation of broilers from MD, losses rose consistently each year from 0.5% in 1965 to a maximum of almost 1.6% in 1970 (Table 5). In view of the fact that condemnations had been increasing each year and would likely have continued to increase after 1970, we have assumed that, as a minimum, condemnations would have remained at least at the 1970 level for the years 1970 to 1975; i.e., 1.6%, had new technology for the prevention of the disease not been introduced. This national average is lower than the losses in Georgia, where losses reached a maximum of 2.89% (Table 5). Layer mortality from LL declined from 5.0% in 1965 to 4.0% in

1975 due to improved genetic resistance to LL. All other factors listed under old technology in Table 4 were considered unchanged between 1965 and visualized 1975 losses.

The losses under actual new technology for 1975 are the most recent data available. For broiler condemnation and for condemnation from other causes, the data represent the actual figures for 1974. Data for broiler mortality were estimated from 1975 statistical estimates. The losses under 1975 actual technology for the other items listed in Table 4 are derived from the best estimates available from national statistics, field trials, or laboratory trials, in the order of preference where available.

The losses under the visualized new technology in 1985 are comprised of 30 to 60% of the actual losses for 1975 from MD and of 20 to 90% of the losses from LL. Most of the improvement between the actual losses in 1975 and the visualized losses in 1985 are from improvement in the HVT vaccine and its complete adoption by the industry, together with a reduction in the total level of MD virus in the poultry population. In egg-type chickens the reduction between 1975 actual losses and 1985 visualized losses is mainly due to the development of control measures for LL.

Benefits from the Control of MD in Poultry

The following general method was used to estimate the benefit from vaccination. First, the proportion of the product saved each year by vaccination was estimated from national figures or from laboratory and field experiments. The value of this part of the product for each year was then estimated from the annual gross value of the product in the United States. The gross value of the product was from published statistics. The value of the product saved in the first half of 1975 was assumed to be half the value of the product for 1974.

When the proportion of product saved is applied to the total value, the cost of chicks, vaccine, feed, labor, farm capital, processing and marketing of the saved product is taken into account. The effect of the technology on the price of the product is also taken into account. Other factors that affect the price may inadvertently be included; e.g., other diseases such as the exotic Newcastle disease outbreak and variations in demand. However, the benefits are estimated in terms of the average market conditions operating during that year. The benefits are, therefore, an estimate of the change in cost of production and reflect the increased production efficiency.

Because the vaccine is applied when chicks are 1 day of age and broilers are marketed at 8 weeks and eggs between 20 and 80 weeks thereafter, there is a delay between expenditures and reaping the rewards of vaccination. But broiler and egg production are year-round operations with only minor seasonal fluctuations in quantity and value, so this lag would have minimal effect on the value of benefits obtained from vaccination.

1. Broiler Condemnations from MD

Loss due to condemnations from "leukosis," which, in fact, was loss from MD, was 1.57% of chickens slaughtered in 1970 (33), the last year of statistics before the vaccine was used extensively in the field. Assuming, as explained earlier, that condemnations would not decline, but allowing for some uncertainty in the estimate of condemnation rate, we assumed that the condemnations would have continued in the years from 1971 to 1975 at a rate 90% of that in 1970, i.e., 1.41%, had the vaccine not been developed. Reduction below this level is considered to be due to the control of MD by the HVT vaccine (Table 6). The loss due to the condemned chickens was taken as the total of the fair market value because the salvage value from rendering the condemned birds is very small. Results of applying the procedure described above are shown for each year since 1970 (Table 6). It is apparent that, under the assumptions made, application of the vaccine has reduced losses from condemnations by $75.35 million.

2. Broiler Condemnations from Causes other than MD

MD weakens chickens so that they become more susceptible to other diseases. In one laboratory experiment, 18 of 26 (69%) unvaccinated, MD-infected chickens responded immunologically to <u>Mycoplasma</u> <u>synoviae</u> with a mean HI titer of 46.9; whereas, 24 of 24 (100%) of the vaccinated chickens responded with a titer of 67.6 (15). A similar effect was noted with coccidiosis; i.e., MD-infected birds were more susceptible to two strains of coccidiosis, shed more oocysts and developed a poorer immunity to subsequent rechallenge than birds without MD infection (1). Vaccination with an attenuated MDV vaccine against MD decreased mortality from causes other than MD from about 20% to 12% (2). Much of this mortality was coccidiosis. Mortality from causes other than MD was reduced by the vaccination from 17.2 to 15.9% (23). In field trials, condemnations from causes other than MD were reduced by vaccination with HVT from 0.59% to 0.25% (8). Also, national condemnations from causes other than leukosis decreased after 1970 when vaccination was introduced. Husbandry and other factors had very little to do with this reduction, and the major part was due to the HVT vaccine, which resulted in healthier chickens more able to resist other diseases. A conservative estimate of the role of vaccine is that 50% of the reductions in condemnations from causes other than MD were from the effect of the vaccine.

Methods similar to those used to calculate benefits from condemnations from MD above, were used to calculate benefits from condemnations from causes other than MD; these benefits were $15.13 million (Table 7).

3. Broiler Mortality

In a similar manner a part of the total broiler mortality is considered to be due to MD and is reduced by vaccination. In one trial, mortality among 2.5 to 5 thousand broilers was reduced from 3.3 to 2.3% in 3 to 9 weeks (8). In another trial, livability among 2.5 million birds was increased 1.8% by vaccination (9). Because the effects of MD are late in the broiler's life, but considerable broiler mortality may occur before 3 weeks, only 10% of the reduction in mortality was considered to be vaccine related. This figure is

conservative when compared with the above figures. Also, because mortality from MD is late, the broilers would have to be fed for almost the entire 9 weeks so that the value of the chickens that died can be considered the same as those marketed.

The mortality of broilers was obtained by subtracting the number sold at 8 weeks from the number hatched (Table 8) for 23 states for which the Statistical Reporting Service collects statistics. Figures including all states are slightly higher but include home consumption and therefore were not used. The resulting mortality varies considerably from year to year. The vaccine was not in general use in broilers until later than in egg-type chickens and the effects on condemnations of broilers (Table 6 and 7) were not noticeable until 1972. Thus, the average mortality prevailing just prior to beginning use of the vaccine was taken as the average for the years from 1969 to 1971 rather than the figure for 1970 which appeared to be unusually low. Total benefits from vaccination on mortality are $9.7 million (Table 8).

4. Feed Conversion in Broilers

Eidson _et al_ (9) estimate, on the basis of trials involving approximately 3 million chickens, that vaccination of broilers with one-half dose or less of vaccine has increased body weight of vaccinated birds 0.1 pounds and that vaccination with a full dose increased body weight of vaccinated birds 0.2 pounds. A large proportion of broilers are vaccinated, some with a full dose, some with a half dose and some with less than a half dose. We have assumed that the average increase in body weight would be about 0.1 pound. The profit margin for broiler production is probably around 5% and represents the return after cost of feed, labor, and capital. However, for the production of the additional 0.1 pound per bird, no additional labor or capital are required. Also, feed conversion would be increased (see below) and medication would be reduced because birds would be healthier. The estimate of a 5% profit from the increased weight appears conservative. Thus, the benefits from increased efficiency of production are $10.31 million (Table 9).

The cost of feed and labor required to produce this extra body weight was not obtained in those experiments. In other experiments (19) involving 4,000 birds, feed conversion in vaccinated birds was better than in control birds by between 0.7 and 1.5% indicating that it was less costly to feed vaccinated chickens. If half the cost of production is feed /actually cost of feed is nearer 65% of cost of production (20)/ and conversion is improved 0.25% the benefit for the years from 1972 to 1975, where the value of poultry was $8 billion, would be $10 million. This figure corroborates the above calculations and indicates that they are conservative.

5. Broiler Breeders Mortality

Losses of broiler breeders from MD have, in the past, been heavy. In one trial (7) 26.3% of broiler breeders died between 9 and 29 weeks of age from all causes whereas only 10% of a comparable vaccinated group died. Industry representatives indicate that losses from MD alone in broiler breeders from hatching to 50 weeks frequently exceed 25%; this loss is reduced to 5% by vaccination and results in reduction of 20% in MD mortality. To be conservative,

an average nationwide loss of 10% will be used for calculations. The value of broiler breeders is greater than the average value of chickens of all types and ages on farms (28, Table 563), but the latter figure is the only one available. The total benefits from vaccination of broiler breeders (Table 10) is $16.58 million.

6. Mortality Among Pullets and Laying Egg-Type Chickens

The level of MD mortality through the life of nonvaccinated egg-laying chickens averaged 19.2% and this was reduced to 2.8% by vaccination, a difference of 16.4% (23). If application of the vaccine under general production conditions resulted in only 90% of this efficiency it would reduce the mortality in these chickens by 14.8%. Also, we estimated from discussions with industry representatives that the vaccine was used by 60% of the producers in 1971 and 90% in subsequent years. Saving from MD mortality in egg-type chickens (Table 11) is $66.96 million.

7. Condemnations of Egg-Type Chickens

Condemnations of mature chickens, which are mostly egg-type, are given in the USDA condemnation reports (33). Once again we assume that had the vaccine not been available, condemnations would have continued at 90% of the level existing just before implementation of the vaccine, or 0.257%. The total benefits (Table 12) were $357 thousand.

8. Benefits from Increase in Egg Production in Egg-Type Chickens

We assume again that 60% of egg producers used the vaccine in 1971 and 90% in subsequent years. Increase in egg production on a hen-day basis was between 4 and 9.3% in field trials when the vaccine was used (11, 14, 23). Also, the difference in 9 random sample tests between the eggs produced per hen housed for the 2 years before and after the institution of vaccination was 10.1% (Table 13). The number of eggs produced per chicken (28, Table 591) reached a plateau in the years from 1967 to 1970, but in 1971 the number was approximately 2% greater and from 1972 to 1973 it was 4% greater than the plateau level (Figure 1). Thus, a 2% increase for 1971 and a 4% increase thereafter was used to calculate the benefits from vaccination (Table 14), which totaled $349.7 million.

9. Improved Feed Conversion in Egg-Type Chickens

. In some studies (11), vaccinated birds required 0.12 pounds more feed per dozen eggs than unvaccinated birds; whereas, in others (14), unvaccinated birds required 0.4 pounds more feed per dozen eggs than vaccinated birds. In neither trial was there any significant effect on egg quality. Although there may be some benefits in feed conversion, they cannot be considered significant. Thus, increased egg production from vaccination probably did not decrease feed efficiency.

10. Benefits from Exploitation by Biologics Manufacturers

As indicated in Table 2, the HVT vaccine against MD was licensed for use in the state of Michigan in November 1970 and for use nationally in March

1971. There were large numbers of small producers in the states from 1970 to 1972, but no attempt has been made to estimate the vaccine produced during that time. The number of vaccine doses licensed was obtained from the Animal and Plant Health Inspection Service and the price from one of the vaccine manufacturers. These statistics are plotted in Figure 2. The number of vaccine doses licensed (10) was multiplied by the sales price, and the total dollar sales volume was obtained (Table 15). According to one manufacturer, this vaccine has yielded approximately 30% profit to the biologics manufacturers from the time the vaccine was first produced until the end of 1974. In 1975, the profit was only 20%. From this, we can conclude that biologics manufacturers made approximately $13.17 million from the sale of the vaccine. If 50% of that profit went to Federal taxes then, approximately $6.56 million was returned to the Federal Treasury. Approximately 50 new jobs were created in the biologics industry to produce this vaccine.

Benefits from Studies on LL

Results of work at the Regional Poultry Research Laboratory (RPRL), East Lansing, Michigan, conclusively demonstrated that lymphoid leukosis viruses (LLV's) could be transmitted from parent to offspring through the egg. This finding had great significance. In the poultry field, it threw light on the epizootiology of the disease so that attempts at eradication could be made. In the human and animal vaccine field, it indicated that vaccines propagated in avian tissues could be contaminated with egg-borne LLV's. Federal regulations now prohibit the presence of LLV's in vaccines for use in domestic animals and man. In turn, this regulation led to a demand for LLV-free eggs, which has been filled commercially. Sales of LLV-free eggs for research and biologics production exceed $1 million; in addition, many biologics manufacturers have their own flocks of chickens. Many breeders are developing or have developed LLV-free commercial strains.

Genetic resistance to LL was discovered at the RPRL in the 1950's. The discovery was not exploited by commercial companies for many years; however, by about 1960, many companies had begun breeding programs for resistance to LL and by 1965 some progress had already been attained.

The peak of LL mortality is when the chickens are about 30 weeks of age, approximately one-quarter of the way through the laying cycle. As indicated in Table 16, the cost of producing, maintaining and feeding a laying chicken was approximately $5.48 and the return on egg production and hen salvage was $8.20. If the chicken died on the 30th week, then approximately one-quarter of the feed would have been eaten ($0.75) and approximately 17.5% of the eggs would have been layed; the return for that chicken would be $1.40. Thus, whereas the profit for healthy chickens would be $2.72; the loss for chickens that died at 30 weeks would be $1.83.

The benefits for breeding for genetic resistance to LL have differed greatly among the breeding companies. Some companies claim to have saved as much as 6% mortality from LL; whereas, others consider this figure too high. For the purposes of this evaluation, we assume that the saving is 1%. Thus,

from the total potential return of $820 per 100 birds, there would be a profit of $2.72 instead of a loss of $1.83; i.e., a total benefit of $4.55. Thus, the saving from a 1% decrease in LL mortality would be approximately 0.55% of the total egg production. Because other laboratories contributed to this discovery only one-half of the benefits are credited to the work at the RPRL. This amounts to $57.87 million (Table 17).

Benefits were also realized in reduction of LL in the parent, grandparent, and great grandparents of egg-laying and broiler chickens. The value of the benefits are difficult to estimate and have not been included here.

Benefits for Human Cancer

The RNA-containing leukosis viruses and the DNA-containing MDV's have their analogs as possible causative agents of human cancer. The contribution of research at the RPRL and at the Animal Physiology and Genetics Institute, Beltsville, Maryland, has been enormous and is not measurable. For example, MD was the first cancer shown to be caused by a herpesvirus and MD is the first neoplastic condition of any animal to be controlled by a commercially applicable vaccine. Dr. Maurice Hilleman of Merck and Company (presentation at the Gustav Stern Symposium on Perspectives in Virology VIII, New York, New York--Tues., Feb. 8, 1972) recently said: "The vaccine, in my judgement, is perhaps the most outstanding development in the virus in cancer field in the last decade or two." According to Dr. Frank J. Rauscher, Scientific Director for Etiology, and now Director, National Cancer Institute: "These findings represent, through widespread acknowledgement, one of the single most important developments in cancer research within the past 10 years. These studies, which now have firmly incriminated a herpesvirus as the cause of a prevalent neoplastic disease in chickens, will contribute substantially not only to the control of this cancer in chickens but also to the prevention and control of cancers in man. The National Cancer Institute feels that these studies are so important, that field stations have been set up in the Burkitt lymphoma area of East Africa so that investigators in this country and abroad can determine the extent to which these findings are applicable to the etiology and prevention of cancers in man."

The chicken leukosis-sarcoma viruses provide one of the best understood models of virus-induced cancer. The work of ARS has contributed greatly to this understanding throughout the years. Notable examples are the demonstration of maternal transmission, genetic cellular resistance, the role of the bursa in disease, the inheritance of endogenous virus and the provision of viruses and experimental inbred chickens to other research laboratories.

Impact of Research on the Field of Science

"Citation analysis, hitherto an arcane tool of historians and sociologists of science, has now been refined to the point where it offers increasingly interesting possibilities to the science administrator. Proponents of the technique believe that within a few years it will find major uses in decisions at the level of national science policy, as an adjunct of the peer review process, and in evaluating the performance of individual scientists.

"The starting point of all citation analysis studies is to count the number of times an article or author is cited in the scientific literature. On the general assumption that the number of citations reflects an article's influence, and therefore quality, this measure can be made to serve as the fundamental yardstick for quantifying many aspects of the cognitive and social structure of science." (34)

A citation analysis was performed on the publications and scientists at the RPRL, East Lansing, and the Animal Physiology and Genetics Institute at Beltsville. The publications are listed in Appendix 2. For comparison, a laboratory in a similar field, namely, the Leukosis Experimental Unit of the Houghton Poultry Research Station, England, and a similar ARS laboratory, the Southeast Poultry Research Laboratory, Athens, Georgia, were selected. Data were already available for other ARS laboratories, the Department of Defense, state universities (26, for ARS in 1965 (29) and the Volcani Center, Institute of Soils and Water, Israel (16).

For the citation analysis, first the publications from the publications list of the laboratory were counted. The number of scientists at the laboratory each year from 1966 to 1975 was added and divided by 10 to give the average SMY per laboratory per year (Table 18). Then the number of publications per SMY was calculated. The number of times a scientist's publications was cited in the literature between those dates was obtained from Science Citation Index (12). The number of citations divided by the number of publications is the <u>impact of the publication</u> and indicates the average number of times each publication was cited. The number of citations divided by the number of scientists is an indication of the <u>impact of the scientist</u> and how many times he was cited in the literature. Because the data collected for the other laboratories represented citations in the 2 years after each publication appeared, a correction factor had to be applied to make them comparable with the above statistics which were collected for the 10-year period 1965 to 1975. This was done by comparing the percentage of total citations that occur in the 2 years after publication (an average of 20.97%) with the percentage of all the citations between these years (40.74%). We concluded that by taking all the citations between these years, approximately twice as many citations were obtained as when only 2 years after publication were taken. Thus, the figures for other authors were multiplied by 2.

The RPRL and the Animal Physiology and Genetics Institute published an average of 5.27 publications per SMY per year. This average is far greater than that of any other ARS or university laboratory tabulated. Also, the normalized impact of the publications was 2.03 citations per publication, which is higher than that of the other ARS or university laboratories except the Houghton Poultry Research Station in England, where the figures were greatly biased by one of the four scientists who had 30.83 citations per publication. Similarly, the impact of the scientists at the RPRL and the Animal Physiology and Genetics Institute was 10.73 citations per scientist, which was greater than at the other laboratories except the Houghton Poultry Research Station. Thus, where these measures are used the impact of the publications and the scientists in ARS involved in research on leukosis and Marek's disease was

greater than the impact of any of the other groups in their respective fields.

The recognition of the impact of work of the scientists at the RPRL and the Animal Physiology and Genetics Institute is in the honors and awards bestowed on the scientists. These honors and awards are listed in Appendix 3.

Summation

The benefit from ARS research on LL and MD to date is $615 million or $180 million for 1974 (Table 19). The first benefits went to the local vaccine producers in the different states and the first companies to use the vaccine shortly after its introduction. However, the use of the vaccine soon resulted in an over production of poultry meat and eggs which, in turn, resulted in a severe drop in prices. However, the supply and demand have now stablized. The benefits are now derived from decrease in the cost of production of each broiler or each dozen eggs. This lower cost of production has resulted from increased efficiency and has resulted in a lower market price than would otherwise have been the case had the discoveries not been made or implemented. Thus, the consumers can purchase products at less cost than they could have without these discoveries. Producers in the industry may or may not have benefitted, depending on how rapidly they adopted the new technology. Also, the nation has benefitted because fewer resources were necessary to produce the same number of broilers and eggs as were produced before the discoveries. The natural resources, e.g., feed, can be conserved to the maximum and the human resources, e.g., labor and capital, can be diverted to other uses.

In addition to the above tangible benefits, there are many intangible benefits. They include the more predictable growout of chickens, the increase in knowledge about cancer and its application to human cancer and the impact of ARS research on other scientists in various fields, including poultry disease research and cancer research. No dollar value can be placed on these benefits, but they are undoubtedly highly significant.

The cost of the research to ARS was approximately $15 million and the cost to the nation approximately $31 million. The benefits of the discoveries clearly far outweigh the cost of the research.

Future Direction of Research

If we assume that the vaccine on the average is 85% effective and that 95% of the commercial poultry receive it, then the annual losses due to MD have been reduced from $223 million by $180 million. Thus, the current annual losses to poultry and egg production are about $43 million. The total losses from lymphoid leukosis are approximately $60 million annually making the losses from both diseases over $100 million annually. Proportionately high losses are being suffered by all countries with a developed poultry industry.

Although a vaccine for Marek's disease is now available, much work still needs to be done. One of the primary problems that remain is that vaccinated

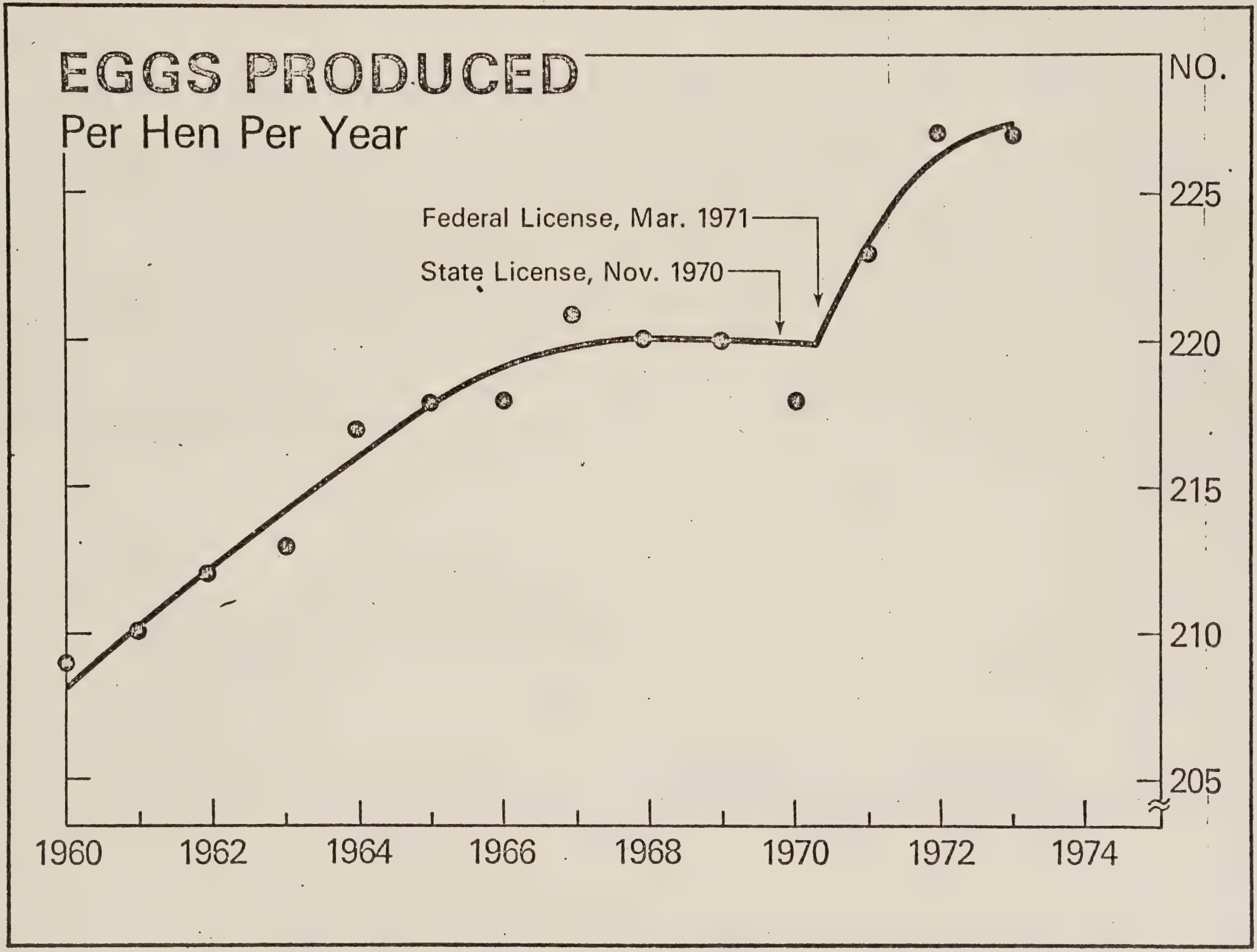
chickens, although showing no disease, are latent carriers of the potentially oncogenic field virus. This problem indicates that the vaccines, with their inherent costs and difficulties, will have to be used on a continuing basis and that the oncogenic MDV will continue to be present in a human food. There is growing evidence that herpesviruses are involved in at least 3 human neoplasms but there is no evidence that viruses causing cancer in chickens will cause disease in man. At some time in the future, we may not be allowed to use poultry containing live MDV for human food.

Possible approaches to the problem of persistent infection are development of (a) an antiviral vaccine rather than a vaccine that prevents neoplasms but has little effect on the oncogenic virus, (b) strains of chickens resistant to infection, (c) husbandry methods that make isolation rearing practical and (d) specific antiviral chemicals.

In order to increase the possibility of successful achievement of these goals, we urgently need more basic information on the virus, its multiplication in the host, the viral antigens, immunity, various types of resistance and the mechanism of tumor induction.

LL may be controlled by testing, eliminating infected breeders and rearing progeny in isolation. However, this method of eradication and isolation rearing is very costly and is in use only where infection-free eggs are required for special purposes as in vaccine production. It is not in use where eggs are produced for food. Thus, further research must be directed toward (a) development of less costly methods of detecting infection, (b) development of a practical vaccine, (c) study of genetic resistance at the level of tumor prevention and regression, (d) determination of the significance of the newly recognized E subgroup virus in the epidemiology of LL, and (e) basic studies on the immunopathogenesis of the disease, which may point to other means of controlling the disease.

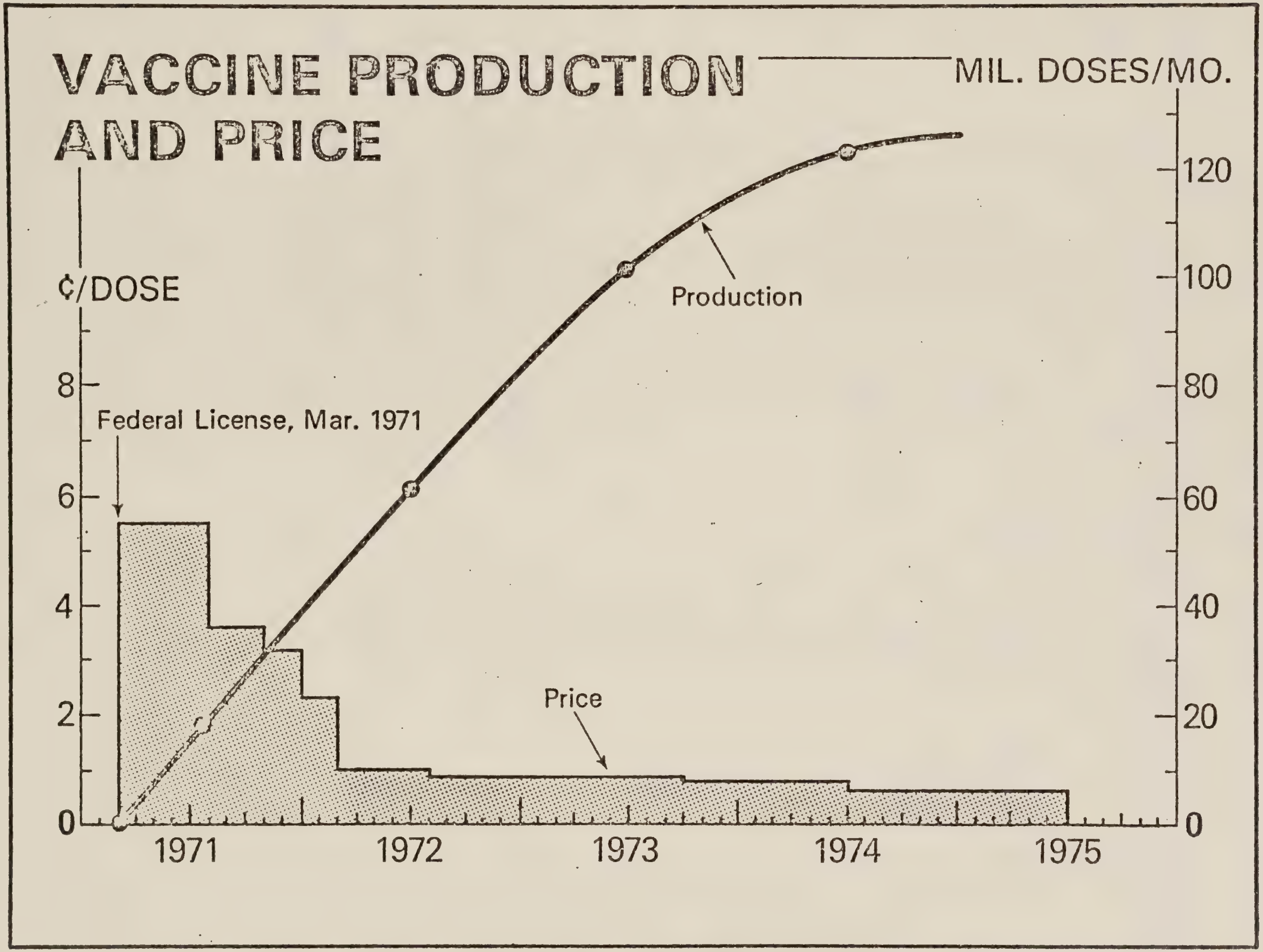
Figure 1. Rate of Lay Per Layer During the Year[a]



---

[a] From Table 591, reference 28.

Figure 2. HVT Vaccine against MD: Production and Price since Federal Licensing[a]



[a] From Dr. H. W. Harper, Animal & Plant Health Inspection Services and a commercial vaccine producer.

Table 1. Estimated Budget and Effort for Research On Lymphoid Leukosis and Marek's Disease (in thousands $)

Fiscal Year	ARS[ab]	ARS[b] Extramural	CSRS[cd]	State[d]	Other[de] Federal	Total	SMY[f] Effort	
							ARS[b]	SAES[dg]
1966	501	30	66	177	98	872	8	10
1967	588	45	102	289	98	1,122	8	10
1968	659	115	105	319	106	1,304	10	14
1969	698	90	219	525	58	1,590	10	18
1970	879	174	277	691	133	2,154	10	25
1971	1,008	118	268	834	105	2,333	10	24
1972	1,169	0	277	1,261	110	2,817	11	30
1973	1,021	0	274	711	64	2,073	11	21
1974	986	0	306	763	90	2,145	11	17
1975	1,043	0	305	700	80	2,128	9	15
Totals	8,555	572	2,199	6,270	942	18,538	98	184

a ARS = Agricultural Research Service.

b Figures from Budget and Finance Division of ARS and include all administrative overhead.

c CSRS = Cooperative States Research Service.

d Figures from Dr. E. J. Splitter, CSRS.

e Includes research directed toward control of poultry diseases and, therefore, does not include all funds; e.g., spinoff from human cancer research. Figures are approximate.

f SMY = Scientific man-years.

g SAES = State Agricultural Experiment Stations.

Table 2. Important Chronology in Marek's Disease Research

Year	Discovery and Reference
1967	Isolation of causative herpesvirus. Churchill and Biggs[24], England. Solomon et al[27], Mich. Nazerian et al[17], Mich.
1969	Virus production in the feather follicle. Calnek & Hitchner[3], New York. Purchase[22], Mich. Nazerian and Witter[18], Mich.
1969	Protection by attenuated viruses. Churchill et al[6], England.
1969	Isolation of the herpesvirus of turkeys. Kawamura et al[13], Minn. Witter et al[35], Mich.
1969	Lab demonstration of protection by HVT against MD. Okazaki et al[21], Mich. Purchase et al[24], Mich.
1970	Field trials of HVT vaccine. Purchase et al[23], Mich.
1970	Licensed by State for use in Michigan (November).
1971	Licensed by APHIS for national use (March).

Table 3. Time for Adoption of New Technology (95% Acceptance)[a]

Examples	Interval	Time (years)
Vaccine for Marek's disease	1971-1973	2
Mechanical harvesting of grapes	1968-1971	3
High-yielding rice, Colombia	1967-1974	7
Hybrid corn, Iowa	1933-1940	7
Monogerm sugar beet seed	1956-1965	9
Mechanical harvesting of cherries	1961-1973	12
Hybrid sorghum	1955-1970	15
Hybrid corn, United States	1933-1969	36
High-yielding wheat, India (50 percent adoption)	1967-1973	6
High-yielding rice, Philippines (50 percent adoption)	1967-1973	6

[a] From reference 36.

Table 4. Actual and Visualized Losses from Lymphoid Leukosis (LL) and Marek's Disease (MD) in Years 1965, 1975, and 1985

Kind of Losses	Nationwide Losses (%)			
	Old Technology		New Technology	
	1965 (Actual)	1975 (Visualized)	1975 (Actual)	1985 (Visualized)
1. Broilers				
Condemnation from MD	0.5[ab]	1.6[c]	0.3[bd]	0.1
Condemnation from other causes	1.9[b]	1.9	1.1[bd]	0.9
Broiler mortality-MD	5.0[e]	5.0	1.3[e]	1.0
Reduced feed conversion (1985= 0.0)	0.5	0.5	0.2[f]	0.0
Broiler breeder loss-LL & MD	20.0[g]	20.0	10.0[g]	5.0
2. Egg-Type Chickens				
Pullet mortality MD	8.9[h]	8.9	1.3[h]	0.5
other	5.0[h]	5.0	2.0[h]	2.0
Layer mortality MD	12.7[h]	12.7	1.7[h]	0.5
LL	5.0[h]	4.0	4.0[h]	0.5
other	14.0[h]	14.0	11.0[h]	9.0
Condemnations from leukosis	0.3[b]	0.3	0.2[b]	0.1
Reduced egg production (1985 = 0.0)	4.5	4.5	0.5[i]	0.0

[a] Percentage of chickens lost or percentage of optimal performance lost at the time.

[b] From reference 33.

[c] Level existing just prior to beginning use of vaccine in 1971.

[d] Actual figures for 1974 from reference 33.

[e] From reference 31.

[f] From reference 9 and 19.

[g] From reference 7.

[h] From reference 23.

[i] From references 11, 14, and 23, Figure 1. See text.

Table 5. Leukosis Condemnations in Broilers[a]

	Percent Condemnations			
Year	United States		Georgia	
1961	0.11		0.08	
1962	0.13		0.09	
1963	0.22		0.22	
1964	0.43		0.50	
1965	0.52		0.54	
1966	0.92		0.89	
1967	1.27		1.75	
1968	1.54		2.71	
1969	1.48		2.54	
1970	1.57	82%[b]	2.89	95%[b]
1971	1.42		2.26	
1972	0.85		0.90	
1973	0.47		0.26	
1974	0.29		0.15	

[a] From reference 33.

[b] Reduction in condemnations from maximum in 1970.

Table 6. Benefits from Reducing Broiler Condemnations from Marek's Disease

	Condemnations		Value	
	Level[a]	Reduction due to Vaccine[b]	Broilers[c]	Broilers Saved by Vaccination
Year	Percent	Percent	$ Billion	$ Million
1970	1.57			
1971	1.42			
1972	0.85	0.56	1.62	9.07
1973	0.47	0.94	2.69	25.29
1974	0.29	1.12	2.44	27.33
1975½				13.66[d]
			Total to date	75.35

a From reference 33.

b Reduction in condemnations assuming that, without vaccination, losses would be at least 90% of the 1970 level, or 1.41%.

c From reference 28, Table 572 and reference 30.

d Value for half of 1975 was taken as half the value for 1974.

Table 7. Benefits from Reducing Broiler Condemnations from Other Causes by Vaccination Against Marek's Disease

	Condemnations		Value	
	Level[a]	Reduction[b]	Broilers[c]	Broilers Saved Vaccination[d]
Year	Percent	Percent	$ Billion	$ Million
1970	1.81			
1971	1.70			
1972	1.49	0.13	1.62	1.05
1973	1.28	0.34	2.69	4.57
1974	1.11	0.51	2.44	6.34
1975½				3.17
			Total to Date	15.13

[a] From reference 33.

[b] Reduction in condemnations assuming that, without vaccination, losses would be at least 90% of the 1970 level, or 1.62%.

[c] From reference 28, Table 572 and reference 30.

[d] Assuming 50% reduction in other condemnations is due to vaccination against MD.

Table 8. Benefits from Reducing Broiler Mortality by Vaccination

Year	Broilers[a]		Mortality			Value	
	Hatched	Marketed	Total Broilers	Total Percent	Reduction[b]	Broilers[c]	Broilers Saved by Vaccine[d]
	Million	Million	Million	Percent	Percent	$ Million	$ Million
1969	2,846	2,702	143	5.0			
1970	2,998	2,899	98	3.3			
1971	2,976	2,863	112	3.8			
1972	3,093	2,992	101	3.3	0.3	1.62	0.49
1973	3,022	2,923	99	3.3	0.3	2.69	0.81
1974	2,954	2,917	37	1.3	2.3	2.44	5.61
1975½							2.81
					Total to date		9.72

---

[a] From reference 31.

[b] Reduction in mortality assuming that, without vaccination, losses would be at least 90% of the average from 1969 to 1971, or 3.6%.

[c] From reference 28, Table 572 and reference 30.

[d] Assuming 10% of the reduction in mortality is due to vaccination against MD.

Table 9. Benefit from Increased Efficiency of Feed Utilization in Broilers

Year	Broilers Number[a]	 Price/lb.[b]		Value of Increased Efficiency[c]
	Billions	Cents		$ Million
1972	2.99	14.1		2.10
1973	2.92	24.0		3.51
1974	2.92	21.5		3.14
1975½				1.56
			Total to date	10.31

a From reference 31.

b From reference 28, Table 572 and reference 30.

c Value of 0.1 lb. increase in weight per broiler assuming 5% profit margin.

Table 10. Benefits from Reduction of Mortality of Broiler Breeders

Year	Broiler Breeders Number[a] Thousands	Broiler Breeders Value[b] $		Value of Breeders Saved[c] $ Million
1972	31,108	1.28		3.98
1973	31,495	1.62		5.10
1974	29,264	1.71		5.00
1975½				2.50
			Total	16.58

a Number of broiler breeder chicks placed. From reference 5 and 32.

b Value per head of all chickens on the farm, excluding commercial broilers. From reference 29, Table 563 and reference 5 and 32.

c Assuming prevention of 10% loss.

Table 11. Benefits from Reducing Mortality of Egg-Type Chickens

Year	Gross Income[a] $ Million	Percent Saved[b] by Vaccination Percent	Value of[c] Chickens Saved $ Million
1971	95.7	14.8	8.50
1972	106.0	14.8	13.35
1973	174.1	14.8	21.94
1974	122.6	14.8	15.45
1975½			7.72
		Total to date	66.96

a Gross income from sale of chickens (excluding broilers). From reference 28, Table 569.

b Ninety percent of reduction obtained in extensive field trials. From reference 23.

c Approximate implementation of 60% in 1971 and 90% thereafter. From reference 37.

Table 12. Benefits from Reducing Condemnations of Egg-Type Chickens

	Condemnations		Value	
Year	Level[a] Percent	Reduction due to Vaccination[b] Percent	Chicken[c] $ Million	Chickens Saved by Vaccination $ Thousand
1970	0.285			
1971	0.233	.024	95.7	23.
1972	0.188	.069	106.0	73.
1973	0.176	.081	174.1	141.
1974	0.192	.065	122.6	80.
1975½				40.
			Total to Date	357.

---

a Condemnations of mature chickens from leukosis from reference 33.

b Reduction in condemnations assuming that, without vaccination, losses would be at least 90% of the 1970 level, or 0.257%.

c From reference 28, Table 569 and reference 30.

Table 13. Benefits in Production (per hen housed) in Random Sample Tests of Egg-Type Chickens [a]

State	Egg Production Per Hen Per Year 2 years before Vaccination	 2 years after Vaccination	 Difference	 Percent
Florida	253.4	232.6	-20.8	-8.2
Minnesota	196.0	215.5	19.5	10.0
Missouri	175.1	236.3	61.2	35.0
New Hampshire	196.8	219.4	22.6	11.5
North Carolina	196.2	223.7	27.5	14.0
Pennsylvania	202.9	217.7	14.8	7.3
Tennessee	223.5	217.9	-5.6	-2.5
Canada	212.0	224.5	12.5	5.9
Missouri	196.5	232.3	35.8	18.2
			Average	10.1

---

[a] From reference 25.

Table 14. Benefit from Increase in Egg Production of Egg-Type Chickens

Year	Eggs Gross Income[a] $ Billion	 Increased Production after Vaccination[b] Percent	Value of Increased Egg Production[c] $ Million
1971	1.83	2.0	21.9
1972	1.80	4.0	64.8
1973	2.91	4.0	104.8
1974	2.93	4.0	105.5
1975½			52.7
		Total to date	349.7

a From reference 28, Table 591 and reference 22.

b From reference 28, Table 591 and references 11, 14, 23 and the Random Sample Tests. From reference 25.

c Assuming 60% implementation in 1971 and 90% thereafter. From reference 37.

Table 15. Sales, Profits and Taxes of Biologics Manufacturers from Sale of the Herpesvirus of Turkeys Vaccine against Marek's Disease

Year	Sales $ Million	Profits $ Million	Federal Taxes $ Million
1971	7.61	2.28	1.14
1972	8.83	2.65	1.32
1973	11.73	3.52	1.76
1974	12.44	3.73	1.86
1975½	4.94	.99	.48
Totals	45.55	13.17	6.56

Table 16. Cost of Growing Egg-Type Chickens

Factor	Healthy Chicken[a] Dollar		Chicken Dying of LL. Dollar	
Pullet growing	1.40		1.40	
Labor	.20		.20	
Housing	.14		.14	
Equipment	.24		.24	
Other	.50		.50	
Feed	3.00		.75	
Total cost of producing		5.48		3.23
Eggs	8.00[b]		1.40	
Hen salvage	.20		0.00	
Total receipts		8.20		1.40
Net profit		2.72		
Net loss				1.83

[a] From reference 20.

[b] 20 dozen eggs at 40¢/doz. from reference 28, Table 591 for 1969.

Table 17. Benefit from Reducing Losses from Lymphoid Leukosis in Egg-Type Chickens

Year	Value of Eggs.[a] $ Billion	Value of Saved Chickens and Eggs.[b] $ Million	Benefits to Regional Poultry Lab.[c] $ Million
1963	1.82		
1964	1.84		
1965	1.84	9.20	4.60
1966	2.16	10.80	5.40
1967	1.80	9.00	4.50
1968	1.93	9.65	4.83
1969	2.25	11.25	5.63
1970	2.22	11.10	5.55
1971	1.83	9.15	4.58
1972	1.80	9.00	4.50
1973	2.91	14.55	7.28
1974	2.93	14.65	7.33
1975½			3.67
		Total to date	57.87

---

a From reference 28, Table 591 and reference 22.

b Assuming a 1% reduction in mortality which would save 0.5% of the value.

c One-half of the total benefits are ascribed to the Regional Poultry Research Laboratory.

Table 18. Impact of Research at Different Laboratories as Measured by Citations and Publications

Laboratory	Years of Study	SMY[a]	Pub per SMY[b]	Impact of Publication[c] Total	Impact of Publication[c] Normalized[d]	Impact of Scientist[e] Total	Impact of Scientist[e] Normalized[d]
Regional Poultry Research Lab., East Lansing, Mich. & Physiology & Genetics Institute Beltsville, Md.	1965-75	10.6	5.27	3.03	2.03	15.96	10.73
Leukosis Experimental Unit, Houghton Poultry Research Station, Houghton, England	1965-75	4.1	4.07	9.71[f]	3.89	39.56[g]	15.84
ARS, Southeast Poultry Research Laboratory, Athens, Georgia	1965-75	10.6	2.67	2.36	3.53	6.30	9.43
ARS, Western Regional Research Center, Albany, Calif.[h]	1961-70	73	0.96	-	1.54[i]	4.6[i]	2.8[i]
ARS, Eastern Regional Research Center, Wyndmoor, Pa.[h]	1961	58	2.46	-	1.74	3.8	2.6
ARS, Northern Regional Research Center, Peoria, Illinois[h]	1967	79	2.39	-	1.28	4.0	2.2
ARS, Southern Regional Research Center, New Orleans, La.[h]	1964	82	2.04	-	1.16	1.6	1.2
Department of Defense Natick Labs.[h]	1967	30	2.83	-	1.56	5.6	2.8
State Universities - sum of all departments[hj]	1961-68	145	2.79	-	1.70	8.4	3.8
Agricultural Research Service, USDA[hk]	1965	3,207	1.34	-	-	-	-
Volcani Center, Inst. of Soils & Water, Israel[l]	1959-70	37	1.67	0.73	-	1.22	-

Table 18. (Cont'd.)

[a] SMY = average number of scientists per year at the laboratory.

[b] Pub/SMY = publications per scientific man-year per year.

[c] Average number of citations per year per publication is a measure of the impact of a publication on the field of science.

[d] Total impact of publication and impact of scientist has been normalized by dividing the total impact figures by the field impact, i.e., the average citation rate of articles in the journals in which the authors from that laboratory published. For Regional Poultry Research Laboratory, the field impact was 1.49; for Houghton Poultry Research Station, 2.50; and for Southeast Poultry Research Laboratory, 0.67.

[e] Average number of citations per year per scientist is a measure of the impact of the scientist in his field of science.

[f] One exceptional scientist with 30.83 citations/publications.

[g] One exceptional scientist with 79.29 citations/scientist.

[h] From reference 26.

[i] Citations are 2 years after publication. Multiplied by 2 (calculated figure 1.94) to give approximately total citations in 10 years.

[j] Universities were Univ. of California, Davis, Departments of Chemistry & Food Science 1962-63); Oregon State, Department of Chemistry, Analytical (1965-69) and Organic (1965-66); Univ. of Minnesota, Department of Biochemistry (1966-67); Oklahoma State, Department of Chemistry (1963-64); Rutgers, Department of Bacteriology (1961-62); Kansas State, Department of Cereal Science (1966-67); MIT, Department Food Science & Nutrition (1967-68).

[k] From reference 29.

[l] From reference 16.

Table 19. Balance Sheet of Cost and Benefit from Leukosis and Marek's Disease Research 1965-1975

Table No.	Source	Total (1965-75) Million $		Annual (1974) Million $	
Benefits from reductions in:					
6	Leukosis broiler condemnations	75.35		27.33	
7	Other broiler condemnations	15.13		6.34	
8	Broiler mortality	9.72		5.61	
9	Feed utilization	10.31		3.14	
10	Broiler breeder mortality	16.58		5.00	
11	Egg-type chicken mortality	66.96		15.45	
12	Condemnation of egg-type chickens	0.36		0.08	
14	Increased egg production	349.70		105.50	
15	Profit to biologics industry	13.17		3.73	
17	Reduction in lymphoid leukosis	57.87		7.33	
	TOTAL BENEFITS FROM RESEARCH		615.15		179.51
Cost of research to:					
	ARS through 1965[a]	5.93		-	
1	ARS 1966-1975	8.56		1.00	
1	ARS extramural	0.57		0.00	
	Total cost to ARS	15.06		1.00	
	Other agencies through 1965[a]	6.11		-	
1	CSRS	2.20		0.31	
1	States	6.27		0.76	
1	Other Federal	0.94		0.09	
	Total cost to other agencies	15.52		1.16	
	TOTAL COST OF RESEARCH		30.58		2.16

[a] Estimate

Appendix I

References

1. Biggs, P. M., Long, P. L., Kenzy, S. G., and Rootes, D. G. 1968. Relationship between Marek's disease and coccidiosis. II. The effect of Marek's disease on the susceptibility of chickens to coccidial infection. Vet. Rec. 83:284-289.

2. Biggs, P. M., Payne, L. N., Milne, B. S., Churchill, A. E., and Chubb, R. C. 1970. Field trials with an attenuated cell-associated vaccine for Marek's disease. Vet. Rec. 87:704-709.

3. Calnek, B. W. and Hitchner, S. B. 1969. Localization of viral antigen in chickens infected with Marek's disease herpesvirus. J. Nat. Cancer Inst. 43:935-949.

4. Churchill, A. E. and Biggs, P. M. 1967. Agent of Marek's disease in tissue culture. Nature 215:528-530.

5. Cochrane, J. E. 1975. Head, Poultry Section, Livestock, Dairy and Poultry Branch, Estimates Division, SRS, USDA. Personal communication.

6. Churchill, A. E., Payne, L. N., and Chubb, R. C. 1969. Immunization against Marek's disease using a live attenuated virus. Nature 221: 744-747.

7. Eidson, C. S., Anderson, D. P., Kleven, S. H. and Brown, J. 1971. Field trials of vaccines against Marek's disease. Avian Diseases 15: 312-322.

8. Eidson, C. S., Kleven, S. H., and Anderson, D. P. 1972. Vaccination against Marek's disease in "Oncogenesis and Herpesviruses". Ed. P. M. Biggs, G. de Thé, and L. N. Payne. IARC Scientific Publication No. 2. IARC, Lyon, France. pp. 147-152.

9. Eidson, C. S., King, D. D., Connell, H. E., Anderson, D. P., and Kleven, S. H. Efficacy of turkey herpesvirus vaccine against Marek's disease in broilers. Poultry Sci. 52:1482-1491. 1973.

10. Harper, H. W. 1975. Senior Staff Veterinarian, Biologics Planning & Analysis, Veterinary Services, APHIS, USDA. Personal communication.

11. Honegger, K. A., McMurray, B. L., Gledhill, R. H., and Purchase, H. G. 1972. Performance response of leghorn type layer flock to turkey herpesvirus vaccine. Avian Dis. 16:78-85.

12. Institute for Scientific Information, Science Citation Index, Philadelphia, Pennsylvania. 1975.

13. Kawamura, H., King, D. J., and Anderson, D. P. 1969. A herpesvirus isolated from kidney cell culture of normal turkeys. Avian Dis. 13:853-863.

14. Kilgore, R. L. 1972. Prophylactic efficacy of a Marek's disease vaccine in broiler and replacement layer chickens. Avian Dis. 16: 72-77.

15. Kleven, S. H., Eidson, C. S., Anderson, D. P., and Fletcher, O. J. 1972. Decrease of antibody response to Myplasma synoviae in chickens infected with Marek's disease herpesvirus. Am. J. Vet. Res. 33: 2037-2042.

16. Lewin, J. 1972. A quantitative and qualitative case-study analysis of scientific productivity in agricultural research. Israel J. Agri. Res. 22:129-139.

17. Nazerian, K., Solomon, J. J., Witter, R. L., and Burmester, B. R. 1968. Studies on the etiology of Marek's disease. II. Finding a herpesvirus in tissue culture. Proc. Soc. Exp. Biol. Med. 127:177-182.

18. Nazerian, K., and Witter, R. L. 1970. Cell-free Transmission and in vivo replication of Marek's disease virus. J. Virol. 5:388-397.

19. Norcross, M. A., and Ott, W. Unpublished data. Animal Science Research Laboratory, Rahway, New Jersey. 1975.

20. North, M. O. 1972. Commercial Chicken Production Manual. The AVI Publishing Co., Westport, Conn.

21. Okazaki, W., Purchase, H. G., and Burmester, B. R. 1970. Protection against Marek's disease by vaccination with a herpesvirus of turkeys. Avian Dis. 14:413-429.

22. Purchase, H. G. 1970. Virus-specific immunofluorescent and precipitin antigens and cell-free virus in tissues of birds infected with Marek's disease. Cancer Research 30:1898-1908.

23. Purchase, H. G., Okazaki, W., and Burmester, B. R. 1972. Long term field trials with the herpesvirus of turkeys vaccine against Marek's disease. Avian Dis. 16:34-44.

24. Purchase, H. G., Witter, R. L., Okazaki, W., and Burmester, B. R. 1971. Vaccination against Marek's disease. Perspectives in Virology. 7:91-110. Academic Press, Inc., New York.

25. Schar, R. D. 1975. Senior Coordinator, NPIP, NER, BARC-E, Beltsville, Maryland. Personal communication.

26. Schatzki, T. 1975. Productivity of a research laboratory. Unpublished manuscript.

27. Solomon, J. J., Witter, R. L., Nazerian, K., and Burmester, B. R. 1968. Studies on the etiology of Marek's disease. I. Propagation of the agent in cell culture. Proc. Soc. Exp. Biol. Med. 127-173-177.

28. United States Department of Agriculture. U. S. Government Printing Office, Washington, D. C. 20402. "Agricultural Statistics 1974."

29. United States Department of Agriculture. "The Use of Quality and Quantity of Publications as Criteria for Evaluating Scientists." U.S. Gov't. Printing Office, Wash., D. C. 20402. Misc. Pub., Agri. Res. Ser. 1041. 1965.

30. United States Department of Agriculture, Statistical Reporting Service, Crop Reporting Board, Washington, D. C. 20250. "Chickens, Eggs and Broilers." 1975.

31. United States Department of Agriculture, Statistical Reporting Service, Crop Reporting Board, Washington, D. C. 20250. "Commercial Broilers." 1975.

32. United States Department of Agriculture, Statistical Reporting Service, Crop Reporting Board, Washington, D. C. 20250. "Eggs, Chickens and Turkeys." 1975.

33. United States Department of Agriculture, Statistical Reporting Service, Crop Reporting Board, Washington, D. C. 20250. "Poultry Slaughter." 1975.

34. Wade, N. 1975. Citation Analysis: A New Tool for Science Administrators. Science 188:429-432.

35. Witter, R. L., Nazerian, K., Purchase, H. G., and Burgoyne, G. H. 1970. Isolation from turkeys of a cell-associated herpesvirus antigenically related to Marek's disease virus. Amer. J. of Vet. Res. 31:525-538.

36. Wittwer, S. 1975. Food Production: Technology and Resource Base. Science 188:579-584.

37. Wittwer, S., and Wolford, J. H. 1972. Michigan Agricultural Experiment Station and Cooperative Extension Service, Michigan State University, East Lansing, Michigan 48823.

Appendix 2

The following is a list of publications from the Regional Poultry Research Laboratory obtained from the Famulus Search Program. At the end of this appendix are publications from the Animal Physiology and Genetics Institute. Original papers, exclusive of reviews, have been keyed in the right hand margin as follows:

E = Error. Publication should not have been included in printout

L = Publication of a significant discovery in lymphoid leukosis technology.

L L = Publication of a highly significant discovery in lymphoid leukosis technology.

M = Publication of a significant discovery in Marek's disease technology.

MM = Publication of a highly significant discovery in Marek's disease technology.

R = Publication of a significant discovery in Reticuloendotheliosis virus technology.

Publications have been arranged in order by author and by year.

Appendix C

Publications from the Animal Physiology and Genetics Institute

1. Crittenden, L. B. 1963. A simple method of skin grafting in chickens. Poultry Sci. 42:1398-99.

2. Crittenden, L. B., Johnson, L. W., and Okasaki, W. 1964. Histocompatibility and erythrocyte antigen variability within highly inbred lines of White Leghorns. Transplantation 2:362-374.

3. Crittenden, L. B., Okazaki, W., and Reamer, R. H. 1964. Genetic control of responses to Rous sarcoma and strain RPL-12 viruses in the cells, embryos, and chickens of two inbred lines. Nat. Cancer Inst. Monograph 17:161-177.

4. Crittenden, L. B., Purchase, H. G., and Okazaki, W. 1964. Genetic analysis of responses to artificial and natural exposure to avian tumor viruses. Poultry Sci. 43:1310.

5. Crittenden, L. B. 1965. Maintenance of single-gene segregation controlling susceptibility to Rous sarcoma virus in poultry flocks. Genetics 52:438.

6. Crittenden, L. B. and Okazaki, W. 1966. Genetic influence of the Rs locus on susceptibility to avian tumor viruses. II. Rous sarcoma virus antibody production after strain RPL-12 virus inoculation. J. Nat. Cancer Inst. 36:299-303.

7. Mun, A. M., Crittenden, L. B., and Clarke, B. J. 1967. Induction of immunological tolerance by intra-coelomic grafts in the 4-day chick embryo. Biological Bull. 132(1):38-43.

8. Crittenden, L. B., and Motta, J. V. 1969. A survey of genetic resistance to leukosis-sarcoma viruses in commercial stocks of chickens. Poultry Sci. 48(5):1751-1757.

9\. Motta, J. V., Crittenden, L. B., and Godfrey, E. F. 1970. The inheritance of resistance to subgroup C leukosis-sarcoma viruses in New Hampshires. Proc. Assn. So. Agr. Workers, Inc., Memphis, Tennessee. February 1-4, p. 189.

9\. Crittenden, L. B., Briles, W. E., and Stone, H. A. 1970. Susceptibility to an avian leukosis-sarcoma virus: Close association with an erythrocyte isoantigen. Science 169:1324-1325.

10\. Crittenden, L. B. and Briles, W. E. 1971. Genetic resistance to infection and oncogenesis by avian RNA tumor viruses. Trans. Proc. 3(3):1259-1263.

Appendix 2

11. Crittenden, L. B., Wendel, Jr., E. J., and Ratzsch, D. 1971. Genetic resistance to the avian leukosis-sarcoma group: Determining the phenotype of adult birds. Avian Diseases 15(8):503-507. L

12. Crittenden, L. B., Purchase, H. G., Solomon, J. J., Okazaki, W., and Burmester, B. R. 1972. Genetic control of susceptibility to the avian leukosis complex. I. The leukosis-sarcoma virus group. Poultry Sci. 51(1):242-261. L

13. Crittenden, L. B., Muhm, R. L., and Burmester, B. R. 1972. Genetic control of susceptibility to the avian leukosis complex. 2. Marek's disease. Poultry Sci. 51(1):261-267. M

14. Smith, E. J., and Crittenden, L. B. 1972. Bound sugars in chick embryo fibroblasts. Poultry Sci. 51(5):1681-1683.

15. Crittenden, L. B. 1972. The influence of the tumor virus (tv) b locus on susceptibility to avian sarcoma viruses of subgroup E. Poultry Sci. 51(5):1797.

16. Crittenden, L. B., and Sarma, P. S. 1972. The influence of the tumor virus (tv) b locus on the expression of the avian leukosis-sarcoma virus group specific antigen. Poultry Sci. 51(5):1797-1798. L

17. Crittenden, L. B., and Wendel, E. J., and Motta, J. V. 1973. The interaction of genes controlling resistance to RSV (RAV-0). Virology 52(2):373-384. L L

18. Crittenden, L. B., and Smith, E. J. 1973. Genetic control of spontaneous RAV-0 production. In: "Possible episomes in eukaryotes." IV Lepetit Colloquium, North-Holland, Amsterdam, pp. 88-93.

19. Payne, L. N., Crittenden, L. B., and Weiss, R. A. 1973. A brief definition of host genes which influence infection by avian RNA tumor viruses. In: "Possible episomes in eukaryotes." IV Lepetit Colloquium, North-Holland, Amsterdam, pp. 94-97.

20. Motta, J. V., Crittenden, L. B., and Pollard, W. O. 1973. The inheritance of resistance to subgroup C leukosis-sarcoma viruses in New Hampshire chickens. Poultry Sci. 52(2):578-586.

21. Smith, E. J. and Crittenden, L. B. 1973. Proteins and glycoproteins in plasma membrane fractions of avian leukosis-sarcoma virus susceptible and resistant chicken embryo fibroblasts. Biochem. Biophys. Acta 298:608-619. L

22. Crittenden, L. B. 1973. Genetic control of endogenous RNA tumor virus production in the chicken. Genetics 74(No.2, Part 2) s56.

Appendix 2

23. Crittenden, L. B., Smith, E. J., Weiss, R. A., and Sarma, P. S. 1974. Host gene control of endogenous avian leukosis virus production, Virology 57(1):128-138. LL

24. Motta, J. V., Crittenden, L. B., and Briles, W. E. 1973. Evidence for single genes controlling resistance to RSV(RAV-1) and RSV(RAV-2) in commercial stocks of chicken. Poultry Sci. 52(5):2067.

25. Crittenden, L. B. 1973. Recent developments in the biology of avian oncornaviruses. Proc. 77th Ann. Meet. of the U.S. Ani. Health Assoc., Oct. 14-19, St. Louis, Mo., pp. 408-428.

26. Crittenden, L. B. 1974. Two levels of genetic resistance to lymphoid leukosis. In Press. Avian Diseases, Accepted July 1974.

27. Motta, J. V., and Crittenden, L. B. 1974. Antibody Response of Two Inbred Lines to RAV-0 and RAV-1. Poultry Sci. 53(5):1958.

28. Smith, E. J., Crittenden, L. B., and Brinsfield, Jr., T. H. 1974. Status of the endogenous avian leukosis virus in resistant cells from a producing line. Virology 61(2):594-596.

29. Weiss, R. A., Crittenden, L. B., Purchase, H. G., and Vogt, P. K. 1974. Genetic control and oncogenicity of endogenous and exogenous avian RNA. Proc. XI Internat'l. Cancer Cong. L

30. Motta, J. V., Crittenden, L. B., Purchase, H. G., Stone, H. A., Okazaki, W., and Witter, R. L. 1975. Low oncogenic potential of avian endogenous RNA tumor virus infection or expression. In Press. Nat. Cancer Inst. LL

31. Crittenden, L. B., and Motta, J. V. 1975. The role of the tvb locus in genetic resistance to RSV(RAV-0). In Press. Virology. LL

32. Stephenson, J. R., Smith, E. J., Crittenden, L. B., and Aaronson, S. A. 1975. Analysis of antigenic determinants of structural polypeptides of avian type-C RNA tumor viruses. In Press. Virology.

33. Smith, E. J., Stephenson, J. R., and Crittenden, L. B. 1975. Antigenic determinants of structural polypeptides of avian type-C RNA tumor viruses: Differential expression in virus negative cells. III Internat'l. Cong. of Virology, Madrid, Spain.

34. Robinson, H. L., and Crittenden, L. B. 1975. The existence, expression and biological activity of inducible C-type viruses in chicken cells. RNA Conf. on Tumor Viruses, Cold Spring Harbor, N. Y.

35. Robinson, H. L, Swanson, C. A., Hruska, J. F., and Crittenden, L. B. 1975. Production of unique C-type viruses by chicken cells grown in bromodeoxyuridine. Virology. L

```
                         F A M U L U S   S E A R C H   P R O G R A M

INPUT CARD.../ID/AVIAN TUMORS & TUMOR VIRUSES. USDA. ARS. REGIONAL POULTRY RESEARCH LAB. E. L
INPUT CARD...ANSING. MICH. 48823

IDENTIFICATION OF INPUT TAPE
AVIAN TUMORS & TUMOR VIRUSES. USDA. ARS. REGIONAL POULTRY RESEARCH LAB. E. LANSING. MICH. 48823
FIELDS ARE  AUTH  DATE  TITL  PUB   CAT   KEY   LOC   ADD   NUMB  DUM1
THE DESCRIPTOR FIELD IS  KEY



INPUT CARD.../FIELDS/(ADD)
INPUT CARD.../SEARCH/REGIONAL POULTRY
```

Appendix

190. ANONYMOUS - UNITED STATES DEPARTMENT OF AGRICULTURE. REGIONAL POULTRY RESEARCH LABORATORY 1955 LYMPHOMATOSIS IN CHICKENS U.S. DEPARTMENT OF AGRICULTURE. CIRCULAR (970). UNITED STATES GOVERNMENT PRINTING OFFICE L/S LL. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1866

716. BELDING. T.C.. DIBBLE. G.D. 1947 THE INFLUENCE OF SULFAMERAZINE UPON THE INCIDENCE OF AVIAN LYMPHOMATOSIS AJVRA 8. 413-415 L/S LL. CONTROL - CHEMOTHERAPY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0885

1039. BRANDLY. C.A. 1940 THE AVIAN EMBRYO. A VALUABLE AID IN DISEASE STUDY JAVMA (WAS VETERINARY MEDICINE) 35. 98-102 OTHER CHICK EMBRYO. INFECTION. CONTROL - VACCINATION. CONTROL - DISEASE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3002

1040. BRANDLY. C.A. 1941 POULTRY DISEASES AND THE VETERINARIAN IOWA VETERINARIAN 12. 5-7. 28 L/S. HV L/S. MD. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1716

1044. BRANDLY. C.A.. NELSON. N.M.. COTTRAL. G.E. 1941 SERIAL PASSAGE OF STRAIN 3. LYMPHOMATOSIS-OSTEOPETROSIS IN CHICKENS JAVMA 99. 219-219 HV MD. OSTEOPETROSIS. PATHOLOGY LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1813 L

1045. BRANDLY. C.A.. NELSON. N.M.. COTTRAL. G.E. 1942 SERIAL PASSAGE OF LYMPHOMATOSIS-OSTEOPETROSIS IN CHICKENS AJVRA 3. 289-295 L/S LL. OSTEOPETROSIS. TRANSMISSION EXPERIMENT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0910 LL

1046. BRANDLY. C.A.. THORP. F.. JR.. PRICKETT. C.O. 1949 RESPONSE OF CHICKEN EMBRYOS TO TISSUES OF CHICKENS AFFECTED WITH THE AVIAN LEUKOSIS COMPLEX AND TO TISSUES OF NORMAL BIRDS POSCA 28. 486-498 L/S CHICK EMBRYO. CONTROL - VACCINATION. ERYTHROBLASTOSIS. LL LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3008 L

1047. BRANDLY. C.A.. WATERS. N.F. 1942 INHERITANCE AS A FACTOR IN POULTRY-DISEASE RESEARCH AJVRA 3(6). 105-110 OTHER GENETICS. RESISTANCE - GENETIC LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2994

1048. BRANDLY. C.A.. WATERS. N.F.. HALL. W.J. 1962 FOWL PARALYSIS AND OTHER FORMS OF THE AVIAN LEUKOSIS COMPLEX YEARBOOK OF AGRICULTURE. 944-962 L/S. HV L/S . MD. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0914

1161. BURGOYNE. G.H.. WITTER. R.L. 1973 EFFECT OF PASSIVELY TRANSFERRED IMMUNOGLOBULINS ON MAREK'S DISEASE AVDIA 17(4). 824-837 HV MD. MATERNAL ANTIBODY. IMMUNITY - PASSIVE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823. PRESENT: MICHIGAN DEPARTMENT OF HEALTH. 3500 NORTH LOGAN STREET. LANSING. MI 48906 2821 M

1162. BURGOYNE. G.H.. WITTER. R.L.. BURMESTER. B.R.. BENEKE. E.S. 1972 THE EFFECT OF PASSIVELY TRANSFERRED IMMUNOGLOBULIN OF MAREK'S DISEASE POSCA 51(5). 1789 HV MD. IMMUNITY - PASSIVE. MATERNAL ANTIBODY LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2574 M

1168. BURMESTER. B.R. 1944 THE INFLUENCE OF CASTRATION AND THE ADMINISTRATION OF SEX HORMONES UPON THE INCIDENCE OF LYMPHOMATOSIS IN CHICKENS POSCA 23(6). 550-550 L/S. HV LL. MD. SEX. HORMONE. CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH L

LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3065

1169. BURMESTER. B.R. 1945 THE INCIDENCE OF LYMPHOMATOSIS AMONG MALE AND FEMALE CHICKENS POSCA 24. 469-472 L/S LL. SEX LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1695 L

1170. BURMESTER. B.R. 1945 SULFONAMIDES WITHOUT EFFECT ON TRANSPLANTABLE LYMPHOID TUMORS OF THE FOWL POSCA 24(5). 477-478 L/S SULFONAMIDE. TRANSPLANTATION. LL. CONTROL - VACCINATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2979

1171. BURMESTER. B.R. 1947 CENTRIFUGATION OF A FILTRABLE AGENT INDUCING OSTEOPETROSIS AND LYMPHOID TUMORS IN THE DOMESTIC FOWL POSCA 26(2). 215-218 L/S CENTRIFUGATION. OSTEOPETROSIS. LL LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2983 LL

1172. BURMESTER. B.R. 1947 THE CYTOTOXIC EFFECT OF AVIAN LYMPHOID TUMOR ANTISERUM CNREA 7(7). 459-467 L/S CYTOTOXICITY. CONTROL - VACCINATION. LL. ANTIBODY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2984

1173. BURMESTER. B.R. 1947 STUDIES ON THE TRANSMISSION OF AVIAN VISCERAL LYMPHOMATOSIS. II. PROPAGATION OF LYMPHOMATOSIS WITH CELLULAR AND CELL-FREE PREPARATIONS CNREA 7(12). 786-797 L/S LL. TRANSMISSION EXPERIMENT. CONTROL - VACCINATION. CELL FREE VIRUS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2985 LL

1174. BURMESTER. B.R. 1947 STUDIES ON THE TRANSMISSION OF AVIAN VISCERAL LYMPHOMATOSIS. II. PROPAGATION OF LYMPHOMATOSIS WITH CELLULAR AND CELL-FREE PREPARATIONS POSCA 26(5). 534-534 HV MD. TRANSMISSION EXPERIMENT. CELL FREE VIRUS. PATHOLOGY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3524 LL

1175. BURMESTER. B.R. 1948 THE INFLUENCE OF SEX HORMONES UPON THE OCCURRENCE OF PROLAPSE IN CHICKENS POSCA 27(5). 655-655 OTHER SEX. HORMONE. OVIDUCT. ANDROGEN LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3068

1176. BURMESTER. B.R. 1948 THE INFLUENCE OF SEX HORMONES UPON THE OCCURRENCE OF PROLAPSE IN CHICKENS POSCA 27(6). 745-750 OTHER GENETICS. SEX. HORMONE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2987

1177. BURMESTER. B.R. 1950 THE EFFECT OF STORAGE AT LOW TEMPERATURE ON THE VIABILITY OF SEVERAL AVIAN LYMPHOID TUMOR STRAINS CNREA 10(11). 708-712 L/S TEMPERATURE. LIVER. LL. STORAGE. NEOPLASM LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3010 L

1178. BURMESTER. B.R. 1952 THE PROPAGATION OF LYMPHOID TUMORS IN THE ANTERIOR CHAMBER OF THE CHICKEN EYE AJVRA 13(47). 246-251 L/S LL. EYE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3017

1179. BURMESTER. B.R. 1952 STUDIES ON FOWL LYMPHOMATOSIS ANYAA 54(ARTICLE 6). 992-1003 L/S. HV LL. MD. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3019

1180. BURMESTER. B.R. 1955 IMMUNITY TO VISCERAL LYMPHOMATOSIS IN CHICKS FOLLOWING INJECTION OF VIRUS INTO DAMS PSEBA 88. LL

Appendix C

153-155 L/S LL. CONTROL - VACCINATION. MATERNAL ANTIBODY. IMMUNITY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0608

1181. BURMESTER. B.R. 1955 THE IN VITRO AND IN VIVO NEUTRALIZATION OF THE VIRUS OF VISCERAL LYMPHOMATOSIS POSCA 34(5). 1184-1184 HV MD. VIRUS NEUTRALIZATION. CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3715 L

1182. BURMESTER. B.R. 1955 IN VITRO AND IN VIVO NEUTRALIZATION OF THE VIRUS OF VISCERAL LYMPHOMATOSIS PSEBA 90. 284-286 L/S VIRUS NEUTRALIZATION. LL. CELL CULTURE. TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1867

1183. BURMESTER. B.R. 1956 BIOASSAY OF THE VIRUS OF VISCERAL LYMPHOMATOSIS. I. USE OF SHORT EXPERIMENTAL PERIOD JNCIA 16(5). 1121-1127 L/S EMBRYO INOCULATION. LL. TRANSMISSION EXPERIMENT. ERYTHROBLASTOSIS. VIRUS TITRATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0268 LL

1184. BURMESTER. B.R. 1956 THE SHEDDING OF THE VIRUS OF VISCERAL LYMPHOMATOSIS IN THE SALIVA AND FECES OF INDIVIDUAL NORMAL AND LYMPHOMATOUS CHICKENS POSCA 35(5). 1089-1099 L/S LL. TRANSMISSION - CONTACT. SALIVA. FECES LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1869 LL

1185. BURMESTER. B.R. 1957 RECENT STUDIES ON THE NATURAL TRANSMISSION OF VISCERAL LYMPHOMATOSIS IN CHICKENS JAVMA 131(11). 496-499 L/S. HV LL. MD. TRANSMISSION - CONTACT. TRANSMISSION - CONGENITAL. RESISTANCE - GENETIC LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3023

1186. BURMESTER. B.R. 1957 ROUTES OF NATURAL INFECTION IN AVIAN LYMPHOMATOSIS ANYAA 68(ARTICLE 2). 487-495 L/S. HV TRANSMISSION - CONGENITAL. TRANSMISSION - CONTACT. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0264

1187. BURMESTER. B.R. 1957 TRANSMISSION OF TUMOR INDUCING AVIAN VIRUSES UNDER NATURAL CONDITIONS TRBMA 15(3). 540-558 L/S L/S. TRANSMISSION - CONGENITAL. TRANSMISSION - CONTACT. NEOPLASM LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3024

1188. BURMESTER. B.R. 1960 RECENT STUDIES ON THE BIOLOGICAL AND PHYSICAL CHARACTERISTICS OF THE AVIAN LEUKOSIS VIRUSES THE SIXTY-THIRD ANNUAL PROCEEDINGS OF THE UNITED STATES LIVESTOCK SANITARY ASSOCIATION. PAGES 211-222 L/S INACTIVATION - PHYSICOCHEMICAL. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0262

1189. BURMESTER. B.R. 1962 THE VERTICAL AND HORIZONTAL TRANSMISSION OF AVIAN VISCERAL LYMPHOMATOSIS CSHSA 27. 471-477 L/S. HV RSV. MD. TRANSMISSION - CONTACT. TRANSMISSION - CONGENITAL. ANTIBODY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0246

1190. BURMESTER. B.R. 1963 ONCOGENIC POTENTIAL OF VIRUS ISOLATED FROM FIELD CASES OF AVIAN VISCERAL LYMPHOMATOSIS PROCEEDINGS OF THE 17TH WORLD VETERINARY CONGRESS (KONGRESSBERICHTE PROCEEDINGS RAPPORTS ACTAS). HANNOVER. GERMANY. AUGUST 14-21. 1. 421-422 L/S CELL FREE VIRUS. TRANSMISSION EXPERIMENT. FIELD TRIAL. ERYTHROBLASTOSIS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH

LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3038

1191. BURMESTER. B.R. 1965 EL COMPLEJO LEUCOSICO AVIAR EN LOS ESTADOS UNIDOS (TRANSLATION: THE AVIAN LEUKOSIS COMPLEX IN THE UNITED STATES) (SPANISH - DISCUSSION IN ENGLISH) MEMORIA II SYMPOSIUM DE PATOLOGIA AVIAR. 8TH REGIONAL. JUNE 14-16. PAGES 113-150 L/S. HV L/S. MD. TRANSMISSION - CONGENITAL. TRANSMISSION - CONTACT. VIRUS NEUTRALIZATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3598

1192. BURMESTER. B.R. 1966 LEUKOSIS AND MAREK'S DISEASE: RECENT WORK IN U.S.A. PAPER GIVEN AT THE BRITISH POULTRY BREEDERS' ROUND TABLE (NOVEMBER) BOURNEMOUTH. ENGLAND L/S. HV LL. MD. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1694

1193. BURMESTER. B.R. 1966 THE OCCURRENCE AND CHARACTERISTICS OF THE PRINCIPAL NEOPLASMA IN THE DOMESTIC CHICKEN THE 1966 ANNUAL MEETING OF THE WILDLIFE DISEASE ASSOCIATION. UNIVERSITY OF MARYLAND. COLLEGE PARK. MARYLAND. AUGUST 14-19. NO PAGE NUMBERS GIVEN L/S. HV RSV. MD. LL. REVIEW LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3041

1194. BURMESTER. B.R. 1966 REPORT ON AVIAN LEUKOSIS CONFERENCE POSCA 45(6). 1411-1415 L/S. HV CONFERENCE PROCEEDING. LL. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0121

1195. BURMESTER. B.R. 1967 THE CURRENT STATUS OF THE AVIAN LEUKOSIS COMPLEX POSCA 46(5). 1239-1240 L/S. HV L/S. MD. NEOPLASM. LL. ERYTHROBLASTOSIS. AMV. SUBGROUP LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3043

1196. BURMESTER. B.R. 1967 CURRENT STATUS OF THE AVIAN LEUKOSIS COMPLEX UNITED STATES DEPARTMENT OF AGRICULTURE PUBLICATION. ARS(44-195). 1-16 L/S. HV L/S. MD. CLASSIFICATION. LL. RNA. SUBGROUP. CELL CULTURE. RSV. GENETICS. RESISTANCE - GENETIC. RESISTANCE - VIRAL. ANTIGEN. CONTROL - ERADICATION. RIF TEST. COFAL TEST. NP CELL. DIFFERENTIAL DIAGNOSIS. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2997

1197. BURMESTER. B.R. 1967 THE PREVENTION OF AVIAN LYMPHOID LEUKOSIS WITH ANDROGENS PROCEEDINGS OF THE 104TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICINE ASSOCIATION. DALLAS. TEXAS. PAGES 139-140 L/S LL. ANDROGEN. HORMONE. RPL12. CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3044

1198. BURMESTER. B.R. 1968 CURRENT STATUS OF THE AVIAN LEUKOSIS COMPLEX SOVEA. WINTER. 131-138 L/S. HV REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0146

1199. BURMESTER. B.R. 1969 THE PREVENTION OF LYMPHOID LEUKOSIS WITH ANDROGENS POSCA 48(2). 401-408 L/S LL. ANDROGEN. BURSECTOMY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0292 LL

1200. BURMESTER. B.R. 1970 VACCINE FIELD TESTING POULTRY MEAT 21(1). 15-16 HV MD. HVT. CONTROL - VACCINATION. FIELD TRIAL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0569

1201. BURMESTER. B.R. 1971 CONTROL OF LYMPHOID LEUKOSIS. II. ERADICATION OF INFECTION PROCEEDINGS OF THE 19TH WORLD VETERINARY CONGRESS 2. 474-477 L/S LL. CONTROL - ERADICATION. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST L

LANSING. MI 48823 2035

1202. BURMESTER. B.R. 1971 VIRUSES OF THE LEUKOSIS/SARCOMA GROUP POULTRY DISEASE AND WORLD ECONOMY 135-152 L/S L/S LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1616

1203. BURMESTER. B.R. 1972 DISCUSSION SUMMARY ONCOGENESIS AND HERPESVIRUSES. INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. LYON. FRANCE. SCIENTIFIC PUBLICATIONS (2). 153-155 HV REVIEW LIB-RP-BK-OK (QR361 .I5) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2530

1204. BURMESTER. B.R. 1972 FUTURE RESEARCH ON THE CONTROL OF MAREK'S DISEASE AVDIA 16(1). 187-191 HV MD. CONTROL. CONTROL - VACCINATION. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2345 L

1205. BURMESTER. B.R. REVIEW OF THE AVIAN LEUKOSIS COMPLEX L/S. HV L/S. MD. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0933

1316. BURMESTER. B.R.. BELDING. R.C. 1949 PROPAGATION OF LYMPHOID TUMORS IN THE ANTERIOR CHAMBER OF THE CHICKEN EYE POSCA 28(5). 759-760 L/S LL. NEOPLASM. EYE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3069

1317. BURMESTER. B.R.. BELDING. T.C. 1947 IMMUNITY AND CROSS IMMUNITY REACTIONS OBTAINED WITH SEVERAL AVIAN LYMPHOID TUMOR STRAINS AJVRA 8(26). 128-133 L/S LL. IMMUNITY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1061 L

1318. BURMESTER. B.R.. BRANDLY. C.A.. PRICKETT. C.O. 1944 VIABILITY OF A TRANSMISSIBLE FOWL TUMOR (OLSON) UPON STORAGE AT LOW TEMPERATURES PSEBA 55. 203-204 L/S LL. STORAGE. TRANSPLANTATION. TRANSMISSION EXPERIMENT. TEMPERATURE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1060

1319. BURMESTER. B.R.. COTTRAL. G.E. 1947 THE PROPAGATION OF FILTRABLE AGENTS PRODUCING LYMPHOID TUMORS AND OSTEOPETROSIS BY SERIAL PASSAGE IN CHICKENS CNREA 7(11). 669-675 L/S LL. OSTEOPETROSIS. VIRUS FILTRATION. TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1058 LL

1320. BURMESTER. B.R.. CUNNINGHAM. C.H.. COTTRAL. G.E.. BELDING. R.C.. GENTRY. R.F. 1956 THE TRANSMISSION OF VISCERAL LYMPHOMATOSIS WITH LIVE VIRUS NEWCASTLE DISEASE VACCINES AJVRA 17(63). 283-289 L/S NDV. TRANSMISSION EXPERIMENT. LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1868 LL

1321. BURMESTER. B.R.. DENINGTON. EFFIE M. 1947 STUDIES ON THE TRANSMISSION OF AVIAN VISCERAL LYMPHOMATOSIS. I. VARIATION IN TRANSMISSIBILITY OF NATURALLY OCCURRING CASES CNREA 7(12). 779-785 L/S LL. TRANSMISSION EXPERIMENT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1059 LL

1322. BURMESTER. B.R.. DMOCHOWSKI. L.. FONTES. A.K.. GREY. C.E.. WALTER. W.G. 1957 ELECTRON MICROSCOPIC STUDIES OF LYMPHOMATOSIS POSCA 36(5). 1107-1108 L/S. HV LL. MD. ULTRASTRUCTURE. RPL12. CELL CULTURE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3076

1323. BURMESTER. B.R.. FONTES. A.K.. WALTER. W.G. 1960 CONTACT TRANSMISSION OF ROUS SARCOMA JNCIA 25(2). 307-313 L/S L

Appendix

RSV. TRANSMISSION - CONTACT. PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0247

1324. BURMESTER. B.R.. FONTES. A.K.. WALTER. W.G. 1960 PATHOGENICITY OF A VIRAL STRAIN (RPL12) CAUSING AVIAN VISCERAL LYMPHOMATOSIS AND RELATED NEOPLASMS. III. INFLUENCE OF HOST AGE AND ROUTE OF INOCULATION JNCIA 24(6). 1423-1442 L/S ROUTE. AGE. LL. PATHOLOGY. ERYTHROBLASTOSIS. TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0266 LL

1325. BURMESTER. B.R.. FONTES. A.K.. WALTER. W.G.. GROSS. M.A. 1958 STUDIES ON THE NEUTRALIZATION OF VIRUS CAUSING VISCERAL LYMPHOMATOSIS AND RELATED NEOPLASMS POSCA 37(5). 1190-1190 L/S. HV LL. MD. VIRUS NEUTRALIZATION. NEOPLASM. RPL12. RSV. IMMUNOLOGY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3078 L

1326. BURMESTER. B.R.. FONTES. A.K.. WATERS. N.F.. BRYAN. W.R.. GROUPE. V. 1960 THE RESPONSE OF SEVERAL INBRED LINES OF WHITE LEGHORNS TO INOCULATION WITH THE VIRUSES OF STRAIN RPL 12 VISCERAL LYMPHOMATOSIS-ERYTHROBLASTOSIS AND OF ROUS SARCOMA POSCA 39(1). 199-215 L/S RESISTANCE - GENETIC. ERYTHROBLASTOSIS. LL. RSV LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0272 LL

1327. BURMESTER. B.R.. FREDRICKSON. T.N. 1961 THE AVIAN LEUKOSIS COMPLEX PROBLEM DISEASE. ENVIRONMENTAL. AND MANAGEMENT FACTORS RELATED TO POULTRY HEALTH. SYMPOSIUM AT THE JEFFERSON AUDITORIUM. UNITED STATES DEPARTMENT OF AGRICULTURE. WASHINGTON. D.C.. MARCH 20-22. AGRICULTURAL RESEARCH SERVICE PUBLICATION 45-2. PAGES 53-55 L/S. HV L/S. MD. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0932

1328. BURMESTER. B.R.. FREDRICKSON. T.N. 1961 EXPERIMENTAL TRANSMISSION OF AVIAN VISCERAL LYMPHOMATOSIS AND RELATED NEOPLASMS PROCEEDINGS OF THE THIRTEENTH SYMPOSIUM OF THE COLSTON RESEARCH SOCIETY HELD AT THE UNIVERSITY OF BRISTOL. APRIL 10-13. BUTTERWORTH'S SCIENTIFIC PUBLICATIONS. LONDON. 13. 101-122 L/S TRANSMISSION EXPERIMENT. LL. PATHOLOGY. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0263

1329. BURMESTER. B.R.. FREDRICKSON. T.N. 1962 VARIATION IN THE ONCOGENIC EXPRESSION OF AVIAN TUMOR (LEUKOSIS) VIRUSES PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON COMPARATIVE MEDICINE. NEW YORK CITY. OCTOBER 10-12. PAGES 170-184 L/S. HV L/S. MD. ONCOGENESIS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3597

1330. BURMESTER. B.R.. FREDRICKSON. T.N. 1963 THE AVIAN LEUKOSIS COMPLEX INTERNATIONAL VETERINARY ENCYCLOPEDIA L/S. HV L/S. MD. REVIEW LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3537

1331. BURMESTER. B.R.. FREDRICKSON. T.N. 1963 VARIATION ON ONCOGENIC EXPRESSION OF AVIAN TUMOR (LEUKOSIS) VIRUSES PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON COMPARATIVE MEDICINE L/S L/S. ONCOGENESIS. NEOPLASM LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3538

1332. BURMESTER. B.R.. FREDRICKSON. T.N. 1964 TRANSMISSION OF VIRUS FROM FIELD CASES OF AVIAN LYMPHOMATOSIS. I. ISOLATION OF VIRUS IN LINE 151 CHICKENS JNCIA 32(1). 37-63 L/S LL. TRANSMISSION EXPERIMENT. PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0111 LL

1333. BURMESTER. B.R.. FREDRICKSON. T.N. 1964 VARIACION DE LA CAPACIDAD ONCOGENICA DE LOS VIRUS PRODUCTORES DE TUMORES EN LAS AVES AONCA 3(1). 3-15 L/S PATHOLOGY. ONCOGENESIS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE.

Appendix

AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1865

1334. BURMESTER. B.R.. FREDRICKSON. T.N. 1966 SOME FACTORS INFLUENCING THE RATE OF CONTACT TRANSMISSION OF ROUS SARCOMA VIRUS AVDIA 10(3). 259-267 L/S RSV. TRANSMISSION - CONTACT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1871

1335. BURMESTER. B.R.. GENTRY. R.F. 1954 THE PRESENCE OF THE VIRUS CAUSING VISCERAL LYMPHOMATOSIS IN THE SECRETIONS AND EXCRETIONS OF CHICKENS POSCA 33(4). 836-842 L/S LL. SECRETION. EXCRETION. TRANSMISSION - CONTACT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1056 LL

1336. BURMESTER. B.R.. GENTRY. R.F. 1954 A STUDY OF POSSIBLE AVENUES OF INFECTION WITH THE VIRUS OF AVIAN VISCERAL LYMPHOMATOSIS AVPMA. 91ST ANNUAL MEETING. SEATTLE. WASHINGTON. AUGUST 23-26. PAGES 311-316 L/S ROUTE. LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0936

1337. BURMESTER. B.R.. GENTRY. R.F. 1954 THE TRANSMISSION OF AVIAN VISCERAL LYMPHOMATOSIS BY CONTACT CNREA 14(1). 34-42 L/S LL. TRANSMISSION EXPERIMENT. TRANSMISSION - CONTACT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1057 L

1338. BURMESTER. B.R.. GENTRY. R.F. 1956 THE RESPONSE OF SUSCEPTIBLE CHICKENS TO GRADED DOSES OF THE VIRUS OF VISCERAL LYMPHOMATOSIS POSCA 35(1). 17-26 L/S DOSE. LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1696 L

1339. BURMESTER. B.R.. GENTRY. R.F.. WATERS. N.F. 1954 THE PRESENCE OF THE VIRUS OF VISCERAL LYMPHOMATOSIS IN EMBRYONATED EGGS LAID BY NORMAL APPEARING HENS POSCA 33(5). 1046-1046 HV MD. CONTROL - VACCINATION. GENETICS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3714 LL

1340. BURMESTER. B.R.. GENTRY. R.F.. WATERS. N.F. 1955 THE PRESENCE OF THE VIRUS OF VISCERAL LYMPHOMATOSIS IN EMBRYONATED EGGS OF NORMAL APPEARING HENS POSCA 34(3). 609-617 L/S TRANSMISSION - CONGENITAL. LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0271 LL

1341. BURMESTER. B.R.. GROSS. M.A.. WALTER. W.G.. FONTES. A.K. 1959 PATHOGENICITY OF A VIRAL STRAIN (RPL12) CAUSING AVIAN VISCERAL LYMPHOMATOSIS AND RELATED NEOPLASMS. II. HOST-VIRUS INTERRELATIONS AFFECTING RESPONSE JNCIA 22(1). 103-127 L/S LL. ERYTHROBLASTOSIS. ROUTE. RESISTANCE - GENETIC. DOSE. VIRUS TITRATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0270 LL

1342. BURMESTER. B.R.. LUCAS. A.M.. GROSS. M.A.. WALTER. W.G. 1958 CONFERENCE ON HISTOPATHOLOGY ON EXPERIMENTAL AVIAN LYMPHOMATOSIS AJVRA 20(74). 223-223 L/S LL. PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0934

1343. BURMESTER. B.R.. LUCAS. A.M.. GROSS. M.A.. WALTER. W.G.. DARCEL. C. LE Q.. DEFENDI. V.. JONES. O.P.. JUNGHERR. E.. MCKEE. G.S.. OLSON. C.. JR. 1959 CONFERENCE ON HISTOPATHOLOGY OF EXPERIMENTAL AVIAN LYMPHOMATOSIS AJVRA 20(74). 223-223 L/S. HV HISTOPATHOLOGY. RPL12. CELL FREE VIRUS. L/S. ERYTHROBLASTOSIS. MD LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2990

Appendix

1344. BURMESTER, B.R., NELSON, N.M. 1945 THE EFFECT OF CASTRATION AND SEX HORMONES UPON THE INCIDENCE OF LYMPHOMATOSIS IN CHICKENS POSCA 24, 509-515 L/S LL, HORMONE, SEX LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1055

1345. BURMESTER, B.R., OKAZAKI, W. 1964 DISCUSSION OF NEUTRALIZATION BY ANTIBODY OF STRAIN RPL12 AND ROUS SARCOMA (BRYAN) VIRUSES AS MEASURED BY DIFFERENT METHODS NCIMA (17), 509-522 L/S LL, RSV, VIRUS NEUTRALIZATION, TECHNIQUE, REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0613

1346. BURMESTER, B.R., OKAZAKI, W., WHETTER, PHYLLIS 1963 NEUTRALIZING ANTIBODIES OF SOME OF THE AVIAN TUMOR VIRUSES - DEVELOPMENT, MEASUREMENT AND INTERRELATIONS PROCEEDINGS OF THE 35TH ANNUAL MEETING OF THE NORTHEASTERN CONFERENCE ON AVIAN DISEASES, UNIVERSITY OF MASSACHUSETTS, AMHERST, MASSACHUSETTS, JUNE 17-19, NO PAGE NUMBER GIVEN L/S RSV, RPL12, VIRUS NEUTRALIZATION LIB-RP-ABSTR-BK-OK (SF995 .N6) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3526 L

1347. BURMESTER, B.R., PRICKETT, C.O. 1944 IMMUNITY REACTIONS OBTAINED WITH A TRANSMISSIBLE FOWL TUMOR (OLSON) CNREA 4(6), 364-366 L/S LL, IMMUNITY, TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1053

1348. BURMESTER, B.R., PRICKETT, C.O. 1945 THE DEVELOPMENT OF HIGHLY MALIGNANT TUMOR STRAINS FROM NATURALLY OCCURRING AVIAN LYMPHOMATOSIS CNREA 5(11), 652-660 L/S LL, TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1054 LL

1349. BURMESTER, B.R., PRICKETT, C.O., BELDING, T.C. 1946 A FILTRABLE AGENT PRODUCING LYMPHOID TUMORS AND OSTEOPETROSIS IN CHICKENS CNREA 6(4), 189-196 L/S VIRUS FILTRATION, LL, OSTEOPETROSIS, TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1063 LL

1350. BURMESTER, B.R., PRICKETT, C.O., BELDING, T.C. 1946 THE OCCURRENCE OF NEURAL AND VISCERAL LYMPHOMATOSIS IN CHICKENS PROVEN IMMUNE TO TRANSPLANTS OF LYMPHOID TUMOR STRAINS POSCA 25(4), 398-398 L/S, HV LL, MD, TRANSPLANTATION, NERVOUS SYSTEM, CONTROL - VACCINATION, IMMUNITY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3066

1351. BURMESTER, B.R., PRICKETT, C.O., BELDING, T.C. 1946 THE OCCURRENCE OF NEURAL AND VISCERAL LYMPHOMATOSIS IN CHICKENS PROVEN IMMUNE TO TRANSPLANTS OF LYMPHOID TUMOR STRAINS POSCA 25(5), 398-398 HV MD, TRANSPLANTATION, CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3711

1352. BURMESTER, B.R., PRICKETT, C.O., BELDING, T.C. 1946 THE OCCURRENCE OF NEURAL AND VISCERAL LYMPHOMATOSIS IN CHICKENS PROVEN IMMUNE TO TRANSPLANTS OF LYMPHOID TUMOR STRAINS POSCA 25(6), 616-621 L/S, HV LL, MD, TRANSPLANTATION, IMMUNITY, CONTROL - VACCINATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1062

1353. BURMESTER, B.R., PURCHASE, H.G. 1970 OCCURRENCE, TRANSMISSION AND ONCOGENIC SPECTRUM OF THE AVIAN LEUKOSIS VIRUSES BIHAA 36, 83-95 L/S L/S , REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1606

1354. BURMESTER, B.R., PURCHASE, H.G., OKAZAKI, W. 1972 LONG-TERM EXPERIENCES WITH THE HERPESVIRUS OF TURKEYS (HVT) AS A VACCINE AGAINST MAREK'S DISEASE PILSA 5, 132-135 HV MD, CONTROL - VACCINATION, FIELD TRIAL, HVT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT

HOPE ROAD, EAST LANSING, MI 48823 2634

1355. BURMESTER, B.R., PURCHASE, H.G., PETERSON, R.D.A. 1964 LACK OF VISCERAL LYMPHOMATOSIS IN BURSECTOMIZED INOCULATED CHICKENS POSCA 43(5), 1306-1306 L/S, HV LL, MD, BURSECTOMY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3083 LL

1356. BURMESTER, B.R., PURCHASE, H.G., WITTER, R.L., OKAZAKI, W. 1971 DEVELOPING AND TESTING OF A MAREK'S DISEASE VACCINE 20TH WESTERN POULTRY DISEASE CONFERENCE, 5TH CALIFORNIA POULTRY HEALTH SYMPOSIUM, MARCH 23-25, 90-93 HV MD, CONTROL - VACCINATION, HVT, REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1374

1357. BURMESTER, B.R., SHARPLESS, G.R., FONTES, A.K. 1960 VIRUS ISOLATED FROM AVIAN LYMPHOMAS UNRELATED TO LYMPHOMATOSIS VIRUS JNCIA 24(6), 1443-1447 ADENO ULTRASTRUCTURE, GAL VIRUS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0287

1358. BURMESTER, B.R., WALTER, W.G. 1960 CONTACT TRANSMISSION OF ROUS SARCOMA AND OCCURRENCE OF THE VIRUS IN SALIVA POSCA 39(5), 1238-1238 L/S RSV, TRANSMISSION - CONTACT, SALIVA, FEATHER FOLLICLE, FECES LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3079

1359. BURMESTER, B.R., WALTER, W.G. 1961 OCCURRENCE OF VISCERAL LYMPHOMATOSIS IN CHICKENS INOCULATED WITH ROUS SARCOMA VIRUS JNCIA 26(2), 511-518 L/S RSV, TRANSMISSION EXPERIMENT, LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0267 L

1360. BURMESTER, B.R., WALTER, W.G., FONTES, A.K. 1956 STUDIES OF PROCEDURES FOR THE IMMUNIZATION OF CHICKENS TO VISCERAL LYMPHOMATOSIS POSCA 35(5), 1135-1135 HV MD, TECHNIQUE, CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3717

1361. BURMESTER, B.R., WALTER, W.G., FONTES, A.K. 1957 THE IMMUNOLOGICAL RESPONSE OF CHICKENS AFTER TREATMENT WITH SEVERAL VACCINES OF VISCERAL LYMPHOMATOSIS POSCA 36(1), 79-87 L/S CONTROL - VACCINATION, LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1052 L

1362. BURMESTER, B.R., WALTER, W.G., GROSS, M.A., FONTES, A.K. 1959 THE ONCOGENIC SPECTRUM OF TWO "PURE" STRAINS OF AVIAN LEUKOSIS JNCIA 23(2), 277-291 L/S ERYTHROBLASTOSIS, AMV, TRANSMISSION EXPERIMENT, PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0265 L

1363. BURMESTER, B.R., WATERS, N.F. 1955 THE ROLE OF THE INFECTED EGG IN THE TRANSMISSION OF VISCERAL LYMPHOMATOSIS POSCA 34(5), 1184-1184 HV MD, TRANSMISSION EXPERIMENT, TRANSMISSION - CONGENITAL LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3716 LL

1364. BURMESTER, B.R., WATERS, N.F. 1955 THE ROLE OF THE INFECTED EGG IN THE TRANSMISSION OF VISCERAL LYMPHOMATOSIS POSCA 34(6), 1415-1429 L/S LL, TRANSMISSION - CONGENITAL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0935 LL

1365. BURMESTER, B.R., WATERS, N.F. 1956 AVIAN LYMPHOMATOSIS YEARBOOK OF AGRICULTURE (UNITED STATES DEPARTMENT OF

Appendix

AGRICULTURE). YEARBOOK SEPARATE (2756). 466-474 L/S LL. LIVER. PATHOLOGY. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0269

1366. BURMESTER. B.R.. WATERS. N.F. 1956 AVIAN LYMPHOMATOSIS YEARBOOK OF AGRICULTURE. YEARBOOK SEPARATE (2756). 466-474 L/S. HV L/S. MD. OSTEOPETROSIS. LEUKEMIA. ERYTHROBLASTOSIS. MYELOCYTOMA LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2995

1367. BURMESTER. B.R.. WATERS. N.F. 1956 VARIATION IN THE PRESENCE OF THE VIRUS OF VISCERAL LYMPHOMATOSIS IN THE EGGS OF THE SAME HENS POSCA 35(4). 939-944 L/S LL. TRANSMISSION - CONGENITAL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1051 L

1368. BURMESTER. B.R.. WATERS. N.F.. GENTRY. R.F. 1953 THE RELATIONSHIP OF THE RESPONSE OF FAMILIES OF CHICKENS TO NATURAL EXPOSURE AND TO INOCULATION WITH THE AGENT OF VISCERAL LYMPHOMATOSIS L/S. HVPOSCA 32(5). 890-891 LL. MD. CONTROL - VACCINATION. TRANSMISSION - CONTACT. RESISTANCE - GENETIC. TRANSMISSION - CONGENITAL. NATURAL EXPOSURE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3073 LL

1369. BURMESTER. B.R.. WITTER. R.L. 1966 AN OUTLINE OF THE DISEASES OF THE AVIAN LEUKOSIS COMPLEX UNITED STATES DEPARTMENT OF AGRICULTURE PRODUCTION RESEARCH REPORT (94). 1-8 L/S. HV L/S. MD. DIFFERENTIAL DIAGNOSIS. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0616

1370. BURMESTER. B.R.. WITTER. R.L. 1970 MAREK'S DISEASE. THE DYNAMICS OF INFECTION PROCEEDINGS OF THE 14TH WORLD'S POULTRY CONGRESS. MADRID. SPAIN. SEPTEMBER 6-12. 3. 297-302 HV MD. EPIZOOTIOLOGY. REVIEW LIB-RP-BK-OK (SF481 .W75) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2539

1371. BURMESTER. B.R.. WITTER. R.L. 1971 AN OUTLINE OF THE COMMON TRANSMISSIBLE NEOPLASTIC DISEASES OF THE CHICKEN UNITED STATES DEPARTMENT OF AGRICUTLURE. AGRICULTURAL RESEARCH SERVICE PRODUCTION RESEARCH REPORT NO. 129. UNITED STATES GOVERNMENT PRINTING OFFICE. 8 PAGES HV. L/S L/S. MD. PATHOLOGY. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1683

1372. BURMESTER. B.R.. WITTER. R.L. 1972 EFFICIENCY OF COMMERCIAL FILTERS AGAINST MAREK'S DISEASE VIRUS APMBA 23(3). 505-508 HV MD. VIRUS FILTRATION. AIR LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2232 MM

1373. BURMESTER. B.R.. WITTER. R.L.. NAZERIAN. K.. PURCHASE. H.G. 1969 A HERPES VIRUS AS A CAUSE OF MAREK'S DISEASE IN CHICKENS BIOLOGY OF AMPHIBIAN TUMORS. SPRINGER-VERLAG. NEW YORK. PAGES 460-468 HV MD. HERPESVIRUS. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0605 M

1374. BURMESTER. B.R.. ZUMBRO. P.B. 1965 THE LATEST ON LEUKOSIS POULTRY DIGEST. JANUARY L/S LL. MD LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2337

1565. CHAMBERLAIN. F.W.A. 1943 ATLAS OF AVIAN ANATOMY. OSTEOLOGY. ARTHROLOGY. MYOLOGY ATLAS OF AVIAN ANATOMY. OSTEOLOGY. ARTHROLOGY. MYOLOGY. MICHIGAN AGRICULTURAL EXPERIMENT STATION MEMOIR BULLETIN (5). HALLENBECK PRINTING COMPANY. LANSING. MICHIGAN. 213 PAGES OTHER STRUCTURE. CLASSIFICATION. BONE MARROW. MUSCLE LIB-BK-OK (SF767 .C5) MICHIGAN STATE UNIVERSITY. DEPARTMENT OF ANATOMY. EAST LANSING. MI 48823: UNITED STATES DEPARTMENT OF AGRICULTURE. E

Appendix 2

AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3528

1596. CHEN. J.H.. LEE. LUCY F.. NAZERIAN. K. 1971 STUDIES ON THE STRUCTURAL PROTEINS OF MAREK'S DISEASE VIRUS BACPA. ABSTRACTS OF THE 71ST ANNUAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY. MINNEAPOLIS. MINNESOTA. MAY 2-7. 222-222 HV MD. STRUCTURE. PROTEIN LIB-RP-ABSTR UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1886

1597. CHEN. J.H.. LEE. LUCY F.. NAZERIAN. K.. BURMESTER. B.R. 1972 STRUCTURAL PROTEINS OF MAREK'S DISEASE VIRUS VIRLA 47(2). 434-443 HV PROTEIN. STRUCTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2175 M

1790. COOPER. M.D.. PURCHASE. H.G.. BOCKMAN. D.E.. GATHINGS. W.E. STUDIES ON THE NATURE OF THE ABNORMALITY OF B-CELL DIFFERENTIATION IN AVIAN LYMPHOID LEUKOSIS. PRODUCTION OF HETEROGENEOUS IGM BY TUMOR CELLS L/S LL. PATHOLOGY. TRANSMISSION - CONGENITAL. TRANSMISSION - CONTACT. BURSECTOMY. HUMAN. GUINEA PIG. MOUSE. ABNORMALITY LIB-PRP UNIVERSITY OF ALABAMA. DEPARTMENT OF PEDIATRICS. BIRMINGHAM. AL 35294. WORK DONE: UNIVERSITY OF ALABAMA. DEPARTMENTS OF PEDIATRICS AND MICROBIOLOGY. BIRMINGHAM. AL 35294; UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823; MEDICAL COLLEGE OF OHIO. DEPARTMENT OF ANATOMY. TOLEDO. OH 43614 3352 L

1806. COTTRAL. G.E. 1942 VINYLITE-RESIN-CORROSION PREPARATIONS IN THE STUDY OF THE AVIAN LEUCOSIS COMPLEX AJVRA 3. 227-234 L/S. HV L/S. MD LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0992

1807. COTTRAL. G.E. 1950 AVIAN LYMPHOMATOSIS. ANOTHER EGG-BORNE DISEASE PROCEEDINGS OF THE 53RD ANNUAL MEETING OF THE UNITED STATES LIVESTOCK SANITARY ASSOCIATION. PAGES 183-192 L/S LL. TRANSMISSION - CONGENITAL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0994

1808. COTTRAL. G.E. 1952 ENDOGENOUS VIRUSES IN THE EGG ANYAA 55(2). 221-234 L/S LL. VIRUS. TRANSMISSION - CONGENITAL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0993

1809. COTTRAL. G.E. 1952 THE ENIGMA OF AVIAN LEUKOSIS PROCEEDINGS OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. 89TH ANNUAL MEETING. ATLANTIC CITY. 285-293 HV. L/S LL. MD. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1664

1821. COTTRAL. G.E.. BURMESTER. B.R.. WATERS. N.F. 1954 EGG TRANSMISSION OF AVIAN LYMPHOMATOSIS POSCA 33(6). 1174-1184 L/S TRANSMISSION - CONGENITAL. OSTEOPETROSIS. LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0245 LL

1822. COTTRAL. G.E.. BURMESTER. B.R. WATERS. N.F. 1949 THE TRANSMISSION OF VISCERAL LYMPHOMATOSIS WITH TISSUES FROM EMBRYONATED EGGS AND CHICKENS FROM "NORMAL" PARENTS POSCA 28(5). 761-761 L/S. HV LL. MD. TRANSMISSION - CONGENITAL. CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3070 LL

1823. COTTRAL. G.E.. DIBBLE. G.D.. WINTON. B. 1947 THE EFFECT OF SODIUM FLUOROACETATE ("1080" RODENTICIDE) ON WHITE LEGHORN CHICKENS POSCA 26(6). 610-613 OTHER MORTALITY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2986

1824. COTTRAL. G.E.. WINTON. B. 1953 PARALYSIS IN DUCKS SIMULATING NEURAL LYMPHOMATOSIS IN CHICKENS POSCA 32(4). 585-589

Appendix 2

Appendix 2

HV · MD. DUCK. PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1663

1847. CRITTENDEN. L.B. 1968 AVIAN TUMOR VIRUSES: PROSPECTS FOR CONTROL WPSJA 24(1). 18-36 L/S. HV L/S. MD. REVIEW. GENETICS. CONTROL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0472 LM

1848. CRITTENDEN. L.B. 1968 OBSERVATIONS ON THE NATURE OF A GENETIC CELLULAR RESISTANCE TO AVIAN TUMOR VIRUSES JNCIA 41(1). 145-153 L/S CELL CULTURE. RESISTANCE - GENETIC LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0112 L

1863. CRITTENDEN. L.B.. BURMESTER. B.R. 1969 INFLUENCE OF HOST GENOTYPE ON MORTALITY FROM LYMPHOID LEUKOSIS AND MAREK'S DISEASE AFTER ARTIFICIAL AND NATURAL EXPOSURE POSCA 48(1). 196-204 L/S. HV LL. MD. MORTALITY. GENETICS. SUBGROUP. TRANSMISSION - CONTACT. CONTROL - VACCINATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0228 LM

1868. CRITTENDEN. L.B.. OKAZAKI. W. 1965 GENETIC INFLUENCE OF THE RS LOCUS ON SUSCEPTIBILITY TO AVIAN TUMOR VIRUSES. I. NEOPLASMS INDUCED BY RPL 12 AND THREE STRAINS OF ROUS SARCOMA VIRUS JNCIA 35(5). 857-863 L/S RSV. RPL12. RESISTANCE - GENETIC LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0362 L

1870. CRITTENDEN. L.B.. OKAZAKI. W.. REAMER. R.H. 1963 GENETIC RESISTANCE TO ROUS SARCOMA VIRUS IN EMBRYO CELL CULTURES AND EMBRYOS VIRLA 20(3). 541-544 L/S RESISTANCE - GENETIC. RSV. CHICK EMBRYO. CELL CULTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0997 L

1872. CRITTENDEN. L.B.. PURCHASE. H.G.. OKAZAKI. W. 1964 GENETIC ANALYSIS OF RESPONSES TO ARTIFICIAL AND NATURAL EXPOSURE TO AVIAN TUMOR VIRUSES POSCA 43(5). 1310-1310 L/S RSV. GENETICS. TRANSMISSION - CONGENITAL. TRANSMISSION - CONTACT LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3011 L

1877. CRITTENDEN. L.B.. STONE. H.A.. REAMER. R.H.. OKAZAKI. W. 1966 TWO LOCI CONTROLLING GENETIC CELLULAR RESISTANCE TO AVIAN LEUKOSIS-SARCOMA VIRUSES POSCA 45(5). 1079-1079 L/S RESISTANCE - GENETIC. L/S. SUBGROUP. CELL CULTURE. RSV. VIRUS HOST CELL RELATIONSHIP LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3042 LL

1878. CRITTENDEN. L.B.. STONE. H.A.. REAMER. R.H.. OKAZAKI. W. 1967 TWO LOCI CONTROLLING GENETIC CELLULAR RESISTANCE TO AVIAN LEUKOSIS-SARCOMA VIRUSES JOVIA 1(5). 898-904 L/S L/S. RESISTANCE - GENETIC. SUBGROUP LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0594 LL

1879. CRITTENDEN. L.B.. VOGT. P.K. 1967 MECHANISM OF GENETIC CELLULAR RESISTANCE TO AVIAN TUMOR VIRUSES PROCEEDINGS OF THE 1967 ANNUAL MEETING OF THE GENETICS SOCIETY OF AMERICA. STANFORD. CALIFORNIA. NO PAGE NUMBERS GIVEN L/S RESISTANCE - GENETIC. SUBGROUP. CELL CULTURE. RSV LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3045

1895. CUNNINGHAM. C.H.. SPRING. MARTHA P.. NAZERIAN. K. 1972 REPLICATION OF AVIAN INFECTIOUS BRONCHITIS VIRUS IN AFRICAN GREEN MONKEY KIDNEY CELL LINE VERO JGVIA 16. 423-427 L/S INFECTIOUS BRONCHITIS. PRIMATE. KIDNEY. VIRUS SYNTHESIS LIB-RP-OK WORK DONE: MICHIGAN STATE UNIVERSITY. DEPARTMENT OF MICROBIOLOGY AND PUBLIC HEALTH. EAST LANSING. MI 48823; UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823. PRESENT: K. NAZERIAN. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL

Appendix

RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3058

2012. DENINGTON. EFFIE M.. LUCAS. A.M. 1955 BLOOD TECHNICS FOR CHICKENS POSCA 34(2). 360-368 OTHER BLOOD. TECHNIQUE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3022

2013. DENINGTON. EFFIE M.. LUCAS. A.M. 1960 INFLUENCE OF HEAT TREATMENT ON THE NUMBER OF ECTOPIC LYMPHOID FOCI IN CHICKENS AJVRA 21(84). 734-739 L/S LL. LYMPHOID FOCI. TEMPERATURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2991

2014. DENINGTON. EFFIE M.. LUCAS. A.M.. BURMESTER. B.R.. COTTRAL. G.E. 1952 RELATIONSHIP OF SO-CALLED LYMPHOID AREAS TO LYMPHOMATOSIS POSCA 31(5). 913-913 L/S. HV LL. MD. CONTROL - VACCINATION. LYMPHOID FOCI. LIVER. SPLEEN LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3072

2073. DMOCHOWSKI. L.. GREY. C.E.. BURMESTER. B.R. 1957 STUDIES ON SUBMICROSCOPIC STRUCTURE OF CHICKEN LYMPHOMATOSIS TUMORS PAACA 2(3). 106-106 L/S LL. ULTRASTRUCTURE. RPL12. SPLEEN. LIVER LIB-RP-ABSTR-OK WORK DONE: UNIVERSITY OF TEXAS. M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE. SECTION OF VIROLOGY AND ELECTRON MICROSCOPY. HOUSTON. TX 77025: BAYLOR UNIVERSITY. COLLEGE OF MEDICINE. TEXAS MEDICAL CENTER. DEPARTMENT OF MICROBIOLOGY. HOUSTON. TX 77025: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823. PRESENT: B.R. BURMESTER. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3025

2074. DMOCHOWSKI. L.. GREY. C.E.. BURMESTER. B.R. 1958 OBSERVATIONS ON THE POSSIBLE LIFE CYCLE OF CERTAIN VIRUSES AS REVEALED IN ELECTRON MICROSCOPE STUDIES OF ULTRATHIN SECTIONS OF CHICKEN LEUKOSIS TUMORS JOURNAL OF APPLIED PHYSICS 29(11). 1616-1616 L/S L/S. NEOPLASM. ULTRASTRUCTURE. SPLEEN. MITOCHONDRIA LIB-RP-ABSTR-OK WORK DONE: UNIVERSITY OF TEXAS. M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE. SECTION OF VIROLOGY AND ELECTRON MICROSCOPY. HOUSTON. TX 77025: BAYLOR UNIVERSITY. COLLEGE OF MEDICINE. TEXAS MEDICAL CENTER. DEPARTMENT OF MICROBIOLOGY. HOUSTON. TX 77025: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823. PRESENT: B.R. BURMESTER. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3028

2075. DMOCHOWSKI. L.. GREY. C.E.. BURMESTER. B.R. 1958 OBSERVATIONS ON THE POSSIBLE LIFE-CYCLE OF CERTAIN VIRUSES AS REVEALED IN ELECTRON MICROSCOPE STUDIES OF ULTRATHIN SECTIONS OF CHICKEN LEUKOSIS TUMORS JOURNAL OF APPLIED PHYSICS 29. 5 L/S LL. ULTRASTRUCTURE LIB UNIVERSITY OF TEXAS. M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE. SECTION OF VIROLOGY AND ELECTRON MICROSCOPY. HOUSTON. TX 77025. B.R. BURMESTER. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3532

2076. DMOCHOWSKI. L.. GREY. C.E.. BURMESTER. B.R. 1958 STUDIES ON THE SUBMICROSCOPIC STRUCTURE OF CHICKEN LEUKOSIS TUMORS: LYMPHOMATOSIS. ERYTHROBLASTOSIS AND GRANULOBLASTOSIS PROCEEDINGS OF THE 7TH INTERNATIONAL RESEARCH ON CANCER CONGRESS. PAGES 247-248 L/S LL. STRUCTURE. ERYTHROBLASTOSIS LIB UNIVERSITY OF TEXAS. M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE. SECTION OF VIROLOGY AND ELECTRON MICROSCOPY. HOUSTON. TX 77025. B.R. BURMESTER. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3531

2077. DMOCHOWSKI. L.. GREY. C.E.. BURMESTER. B.R. 1959 STUDIES ON THE SUBMICROSCOPIC STRUCTURE OF CHICKEN LEUKOSIS: LYMPHOMATOSIS. ERYTHROBLASTOSIS AND GRANULOBLASTOSIS ACTA UNION INTERNATIONAL CONTRE LE CANCER 15. 780-790 L/S ULTRASTRUCTURE. LL. ERYTHROBLASTOSIS. RPL12. SPLEEN LIB-RP-OK WORK DONE: UNIVERSITY OF TEXAS. M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE. SECTION OF VIROLOGY AND ELECTRON MICROSCOPY. HOUSTON. TX 77025: BAYLOR UNIVERSITY. COLLEGE OF MEDICINE. TEXAS MEDICAL CENTER. DEPARTMENT OF MICROBIOLOGY. HOUSTON. TX 77025: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST

LANSING, MI 48823. PRESENT: B.R. BURMESTER, UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3031

2078. DMOCHOWSKI, L., GREY, C.E., BURMESTER, B.R. 1959 SUBMICROSCOPIC MORPHOLOGY OF AVIAN NEOPLASMS. IV. STUDIES ON ERYTHROBLASTOSIS OF STRAIN RPL-12 PSEBA 100, 517-519 L/S ERYTHROBLASTOSIS, RPL12, NEOPLASM, SPLEEN, ULTRASTRUCTURE LIB-RP-OK WORK DONE: UNIVERSITY OF TEXAS, M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE, SECTION OF VIROLOGY AND ELECTRON MICROSCOPY, HOUSTON, TX 77025; BAYLOR UNIVERSITY, COLLEGE OF MEDICINE, TEXAS MEDICAL CENTER, DEPARTMENT OF MICROBIOLOGY, HOUSTON, TX 77025; UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823. PRESENT: B.R. BURMESTER, UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3030

2079. DMOCHOWSKI, L., GREY, C.E., BURMESTER, B.R., FONTES, A.K. 1958 SUBMICROSCOPIC MORPHOLOGY OF AVIAN NEOPLASMS. I. STUDIES ON ERYTHROBLASTOSIS PSEBA 98, 662-665 L/S ERYTHROBLASTOSIS, NEOPLASM, ULTRASTRUCTURE LIB-RP-OK WORK DONE: UNIVERSITY OF TEXAS, M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE, SECTION OF VIROLOGY AND ELECTRON MICROSCOPY, HOUSTON, TX 77025; BAYLOR UNIVERSITY, COLLEGE OF MEDICINE, TEXAS MEDICAL CENTER, DEPARTMENT OF MICROBIOLOGY, HOUSTON, TX 77025; UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823. PRESENT: B.R. BURMESTER, UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3026

2080. DMOCHOWSKI, L., GREY, C.E., BURMESTER, B.R., GROSS, M.A. 1959 SUBMICROSCOPIC MORPHOLOGY OF AVIAN NEOPLASMS. III. STUDIES OF VISCERAL LYMPHOMATOSIS PSEBA 100, 514-516 L/S LL, TRANSMISSION - CONTACT, TRANSMISSION - CONGENITAL, ULTRASTRUCTURE, RPL12 LIB-RP-OK WORK DONE: UNIVERSITY OF TEXAS, M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE, SECTION OF VIROLOGY AND ELECTRON MICROSCOPY, HOUSTON, TX 77025; BAYLOR UNIVERSITY, COLLEGE OF MEDICINE, TEXAS MEDICAL CENTER, DEPARTMENT OF MICROBIOLOGY, HOUSTON, TX 77025; UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823. PRESENT: B.R. BURMESTER, UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3029

2081. DMOCHOWSKI, L., GREY, C.E., BURMESTER, B.R., WALTER, W.G. 1958 SUBMICROSCOPIC MORPHOLOGY OF AVIAN NEOPLASMS. II. STUDIES ON GRANULOBLASTOSIS (MYELOBLASTOSIS) PSEBA 98, 666-669 L/S NEOPLASM, AMV, ERYTHROBLASTOSIS, ULTRASTRUCTURE LIB-RP-OK WORK DONE: UNIVERSITY OF TEXAS, M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE, SECTION OF VIROLOGY AND ELECTRON MICROSCOPY, HOUSTON, TX 77025; BAYLOR UNIVERSITY, COLLEGE OF MEDICINE, TEXAS MEDICAL CENTER, DEPARTMENT OF MICROBIOLOGY, HOUSTON, TX 77025; UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823. PRESENT: B.R. BURMESTER, UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3027

2082. DMOCHOWSKI, L., GREY, C.E., BURMESTER, B.R., WALTER, W.G. 1960 ELECTRON MICROSCOPIC STUDIES OF CHICKEN RENAL ADENOCARCINOMA JOURNAL OF APPLIED PHYSICS 31(10), 1839-1839 L/S, ADENO ULTRASTRUCTURE, CELL SURFACE, CARCINOMA LIB-RP-ABSTR-OK WORK DONE: UNIVERSITY OF TEXAS, M.D. ANDERSON HOSPITAL AND TUMOR INSTITUTE, SECTION OF VIROLOGY AND ELECTRON MICROSCOPY, HOUSTON, TX 77025; BAYLOR UNIVERSITY, COLLEGE OF MEDICINE, TEXAS MEDICAL CENTER, DEPARTMENT OF MICROBIOLOGY, HOUSTON, TX 77025; UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823. PRESENT: B.R. BURMESTER, UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3033

2309. ECKERT, E.A., WATERS, N.F., BURMESTER, B.R., BEARD, DOROTHY, BEARD, J.W. 1954 DOSE-RESPONSE RELATIONS IN EXPERIMENTAL TRANSMISSION OF AVIAN ERYTHROMYELOBLASTIC LEUKOSIS. IV. STRAIN DIFFERENCES IN HOST-RESPONSE TO THE VIRUS JNCIA 14(5), 1067-1080 L/S TRANSMISSION EXPERIMENT, ERYTHROBLASTOSIS, VIRUS TITRATION, CONTROL - VACCINATION LIB-RP-OK WORK DONE: DUKE UNIVERSITY, SCHOOL OF MEDICINE, DEPARTMENT OF SURGERY, DURHAM, NC 27706, AND UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE

Appendix L

Appendix 2

ROAD. EAST LANSING. MI 48823. PRESENT: B.R. BURMESTER. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3021

2368. EL DARDIRY. A.H.. WATERS. N.F.. COTTRAL. G.E. 1952 THE RESPONSE OF INBRED LINES OF CHICKENS TO LYMPHOID TUMOR TRANSPLANTS POSCA 31(3). 523-534 L/S TRANSPLANTATION. LL. RESISTANCE - GENETIC LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0260

2521. FAUSER. INGUNA SILAVS. MALLMANN. VIRGINIA H.. PURCHASE. H.G.. MALLMANN. W.L. 1973 THYMIC DEPENDENCE FOR DELAYED HYPERSENSITIVITY AND MIGRATION-INHIBITION FACTOR IN THE CHICKEN ABSTRACTS OF THE 73RD ANNUAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY. MIAMI BEACH. FLORIDA. MAY 6-11. 120-120 OTHER THYMUS. THYMECTOMY. BURSECTOMY. CONTROL - VACCINATION LIB-RP-ABSTR-BK-OK (QR1 .A6) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2852

2522. FAUSER. INGUNA SILAVS. PURCHASE. H.G.. LONG. P.A.. VELICER. L.F.. MALLMANN. VIRGINIA H.. FAUSER. H.T.. WINEGAR. G.O. 1973 DELAYED HYPERSENSITIVITY AND LEUCOCYTE MIGRATION INHIBITION IN CHICKENS WITH BCG OR MAREK'S DISEASE INFECTION AVIAN PATHOLOGY 2(1). 55-61 HV MD. INHIBITION. ANTIGEN. BURSA OF FABRICIUS. THYMUS. ANTIBODY. ONCOGENICITY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2851 M

2540. FENYO. EVA MARIA. GRUNDNER. GERTRUD. NAZERIAN. K.. CLEMENTS. G. REASSORTMENT OF MOUSE C-TYPE VIRUS MARKERS IN SOMATIC CELL HYBRIDS OTHER REASSORTMENT. MARKER. MOUSE LIB-PRP WORK DONE: KAROLINSKA INSTITUTE. DEPARTMENT OF TUMOR BIOLOGY. STOCKHOLM 60. SWEDEN. PERMANENT: K. NAZERIAN. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3421

2605. FONTES. A.K.. BURMESTER. B.R.. ISELER. PATRICIA E. 1957 CULTIVATION IN TISSUE CULTURE OF THE VIRUS OF AVIAN VISCERAL LYMPHOMATOSIS POSCA 36(5). 1117-1118 L/S. HV LL. MD. CELL CULTURE. RPL12 LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3077

2606. FONTES. A.K.. BURMESTER. B.R.. WALTER. W.G.. ISELER. PATRICIA E. 1958 GROWTH IN TISSUE CULTURE OF CYTOPATHOGENIC AGENT FROM STRAIN OF VIRUS WHICH PRODUCES AVIAN LYMPHOMATOSIS PSEBA 97. 854-857 L/S. ADENO LL. GAL VIRUS. CELL CULTURE. CYTOPATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1086

2672. FREDRICKSON. T.N.. BURMESTER. B.R. 1961 CLINICAL AND HISTOPATHOLOGICAL EXAMINATION OF AN ACUTE FORM OF VISCERAL LYMPHOMATOSIS POSCA 40(5). 1404-1404 L/S. HV LL. MD. HISTOPATHOLOGY. MORTALITY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3081

2673. FREDRICKSON. T.N.. BURMESTER. B.R. 1961 CLINICAL AND HISTOPATHOLOGICAL EXAMINATION OF AN ACUTE FORM OF VISCERAL LYMPHOMATOSIS THE 50TH ANNUAL MEETING OF THE POULTRY SCIENCE ASSOCIATION. AUGUST 8-11. PAGES 37-37 HV MD. HISTOPATHOLOGY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1084

2674. FREDRICKSON. T.N.. BURMESTER. B.R.. OKAZAKI. W. 1965 TRANSMISSION OF VIRUS FROM FIELD CASES OF AVIAN LYMPHOMATOSIS. II. DEVELOPMENT OF STRAINS BY SERIAL PASSAGE IN LINE 15I CHICKENS AVDIA 9(1). 82-103 L/S TRANSMISSION EXPERIMENT. PATHOLOGY. HISTOPATHOLOGY. NEOPLASM LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0131 L

2675. FREDRICKSON. T.N.. PIRAINO. F.F.. OKAZAKI. W.. BURMESTER. B.R. 1964 RESPONSES OF DIFFERENT STOCKS OF CHICKENS TO INOCULATION AS EMBRYOS AND AS CHICKS WITH STRAIN RPL 12 AND FIELD ISOLATES OF LEUKOSIS VIRUS AVDIA 8(1). 123-134 L/S RPL12. CHICK EMBRYO. RESISTANT - GENETIC. TRANSMISSION EXPERIMENT LIB-RP REGIONAL POULTRY RESEARCH LABORATORY. L

3606 E MT HOPE RD, E LANSING, MI 48823 1870

2676. FREDRICKSON, T.N., PURCHASE, H.G., BURMESTER, B.R. 1964 TRANSMISSION OF VIRUS FROM FIELD CASES OF AVIAN LYMPHOMATOSIS. III. VARIATION IN THE ONCOGENIC SPECTRA OF PASSAGED VIRUS ISOLATES NCIMA (17), 1-29 L/S ERYTHROBLASTOSIS, LL, TRANSMISSION EXPERIMENT, PATHOLOGY, HISTOPATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0226 LL

2827. GARRIDO, C., OKAZAKI, W., PURCHASE, H.G., BURMESTER, B.R. 1972 STORAGE OF A CELL-ASSOCIATED HERPESVIRUS OF TURKEYS (HVT STRAIN FC126) VACCINE AVDIA 16(1), 45-51 HV HVT, INACTIVATION - PHYSICOCHEMICAL, STORAGE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2348 M

2828. GARRIDO, C., OKAZAKI, W., PURCHASE, H.G., LEE, LUCY F., BURMESTER, B.R. 1972 A MULTILAYER CELL-CULTURE TECHNIQUE TO IMPROVE YIELDS OF A HERPESVIRUS OF TURKEYS AVDIA 16(5), 1087-1093 HV MD, HVT, TECHNIQUE, CELL CULTURE, CONTROL - VACCINATION, CELL FREE VIRUS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2661 M

2859. GENTRY, R.F. 1952 THE COMPLEMENT-FIXATION TEST - A REVIEW OF ITS APPLICATION IN POULTRY DISEASES PROCEEDINGS OF THE 89TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICINE ASSOCIATION, ATLANTIC CITY, NEW JERSEY, JUNE 23-26, PAGES 281-285 OTHER COFAL TEST, REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3020

2860. GENTRY, R.F. 1952 EFFECT OF KREBIOZEN ON LYMPHOID TUMOR TRANSPLANTS IN CHICKENS POSCA 31(5), 875-878 HV LL, TRANSPLANTATION, KREBIOZEN LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1904

2868. GENTRY, R.F., BURMESTER, B.R. 1955 THE PROPAGATION OF THE VIRUS OF VISCERAL LYMPHOMATOSIS IN EMBRYONATED EGGS POSCA 34(3), 669-672 L/S LL, CHICK EMBRYO, TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0347 L

2869. GENTRY, R.F., BURMESTER, B.R. 1955 TUMOR INCIDENCE IN THE PROGENY OF HENS REPEATEDLY INJECTED AS ADULTS WITH VISCERAL LYMPHOMATOSIS VIRUS POSCA 34(1), 44-46 HV LL, CONTROL - VACCINATION, GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1905 L

3087. GROSS, M.A. 1957 THE ARTIFICIAL AND NATURAL TRANSMISSION OF AVIAN VISCERAL LYMPHOMATOSIS SOVEA 10(4), NO PAGE NUMBER(S) GIVEN L/S LL, TRANSMISSION - CONGENITAL, TRANSMISSION EXPERIMENT, TRANSMISSION - CONTACT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1154 L

3094. GROSS, M.A., BURMESTER, B.R., MANTEL, N. 1962 PATHOGENICITY OF A VIRAL STRAIN (RPL12) CAUSING AVIAN VISCERAL LYMPHOMATOSIS AND RELATED NEOPLASMS. IV. VIRUS BIOASSAY BASED ON A LOG-EXPONENTIAL DISTRIBUTION OF HOST MORTALITY TIMES JNCIA 28(5), 1111-1124 L/S RPL12, VIRUS TITRATION, LL, TECHNIQUE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0345 LL

3095. GROSS, M.A., BURMESTER, B.R., WALTER, W.G. 1959 PATHOGENICITY OF A VIRAL STRAIN (RPL12) CAUSING AVIAN VISCERAL LYMPHOMATOSIS AND RELATED NEOPLASMS. I. NATURE OF THE LESIONS JNCIA 22(1), 83-101 L/S LL, RPL12, PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0346 L

Appendix 2

3519. HOLMES, M.J. 1939 PREFACE - TRENDS OF RESEARCH IN INCUBATION PROCEEDINGS OF THE 7TH WORLD'S POULTRY CONGRESS, PAGE 179 OTHER CHICK EMBRYO, REVIEW LIB UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0162

3868. JUNGHERR, E.L. 1941 TENTATIVE PATHOLOGIC NOMENCLATURE FOR THE DISEASE AND/OR THE DISEASE COMPLEX VARIOUSLY DESIGNATED AS FOWL LEUCEMIA, FOWL LEUCOSIS, RANGE PARALYSIS, FOWL PARALYSIS, IRITIS, LYMPHOMATOSIS, LYMPHOCYTOMA, NEUROLYMPHOMATOSIS, LEUCOTIC TUMORS, LEUCEMOID DISEASES, ETC. AJVRA 2, 116-116 HV, L/S MD, LL, PATHOLOGY, TERMINOLOGY, CLASSIFICATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1351

4073. KINNEY, T.B., JR., LOWE, P.C., BOHREN, B.B., WILSON, S.P. 1968 GENETIC AND PHENOTYPIC VARIATION IN RANDOMBRED WHITE LEGHORN CONTROLS OVER SEVERAL GENERATIONS POSCA 47(1), 113-123 OTHER GENETICS, PHENOTYPIC MIXING LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, ANIMAL HUSBANDRY RESEARCH DIVISION, REGIONAL POULTRY BREEDING LABORATORY, LAFAYETTE, IN 47907 3125 E

4404. LEE, LUCY F. 1971 LARGE-SCALE PRODUCTION OF MAREK'S DISEASE VIRUS AVDIA 15(3), 565 HV MD LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1975 M

4405. LEE, LUCY F. 1972 INDUCTION OF DEOXYRIBONUCLEIC ACID SYNTHESIS AND THE ONCOGENICITY OF MAREK'S DISEASE VIRUS JOVIA 10(2), 167-170 HV MD, DNA, ONCOGENICITY, VIRUS SYNTHESIS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2299 MM

4406. LEE, LUCY F. IN VITRO ASSAY OF MITOGEN STIMULATION OF AVIAN LYMPHOCYTES HV MD, MITOSIS, THYMUS, IMMUNITY - CELLULAR LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3424 M

4415. LEE, LUCY F., ARMSTRONG, R.L., NAZERIAN, K. 1971 DNA BUOYANT DENSITY OF MAREK'S DISEASE VIRUS AND A HERPES VIRUS OF TURKEYS BACPA, ABSTRACTS OF THE 71ST ANNUAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, MINNEAPOLIS, MINNESOTA, MAY 2-7, 170-170 HV MD, HVT, DNA, DENSITY LIB-RP-ABSTR UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1885 MM

4416. LEE, LUCY F., ARMSTRONG, R.L., NAZERIAN, K. 1972 COMPARATIVE STUDIES OF SIX AVIAN HERPESVIRUSES AVDIA 16(4), 799-805; MAREK'S DISEASE, I: GENETICS AND VIROLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION, NEW YORK, PAGES 106-112, 1974 HV HVT, VIRUS RELEASE, DNA LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2568 M

4417. LEE, LUCY F., KIEFF, E.D., BACHENHEIMER, S.L., ROIZMAN, B., SPEAR, P.G., BURMESTER, B.R., NAZERIAN, K. 1971 SIZE AND COMPOSITION OF MAREK'S DISEASE VIRUS DEOXYRIBONUCLEIC ACID JOVIA 7(3), 289-294 HV MD, DNA, SIZE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1685 MM

4418. LEE, LUCY F., NAZERIAN, K. 1970 BIOPHYSICAL AND BIOCHEMICAL CHARACTERIZATION OF HERPES-VIRUS OF TURKEY (HVT) BACPA, PAGE 171 HV HVT, DNA, BIOCHEMISTRY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0645 M

4419. LEE, LUCY F., NAZERIAN, K., BURMESTER, B.R. 1973 CHARACTERIZATION OF AVIAN REOVIRUS 24 AVDIA 17(3), 559-567 OTHER REOVIRUS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3206

4420. LEE, LUCY F., NAZERIAN, K., PURCHASE, H.G., BURMESTER, B.R. 1973 RELEASED AND EXTRACTED VIRIONS OF MAREK'S DISEASE M

Appendix

VIRUS AVDIA 17(4), 838-846 HV MD, DNA, CELL FREE VIRUS, VIRUS RELEASE, CELL CULTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3178

4421. LEE, LUCY F., ROIZMAN, B., SPEAR, PATRICIA G., KIEFF, E.D., BURMESTER, B.R., NAZERIAN, K. 1969 MAREK'S DISEASE HERPES VIRUS: A CYTOMEGALOVIRUS? PNASA 64(3), 952-956 HV MD, CYTOMEGALOVIRUS, DNA LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0604 MM

4457. LESHER, S., ALBERT, S. 1953 A HISTOCHEMICAL STUDY OF THE LIVERS OF NORMAL AND LYMPHOMATOTIC CHICKENS POSCA 32(5), 911-911 L/S LL, SPLEEN, ULTRASTRUCTURE, HISTOCHEMISTRY, LIVER LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3074

4458. LESHER, S., BURMESTER, B.R. 1955 PLASMA PHOSPHATASE ACTIVITIES OF NORMAL AND LYMPHOMATOUS CHICKENS CNREA 15(8), 537-540 L/S LL, BLOOD, BIOCHEMISTRY, ENZYME LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1163

4459. LESHER, S., COTTRAL, G.E., WATERS, N.F. 1955 THE EFFECT OF LOW DOSAGE X-RAYS IRRADIATION ON REPRODUCTION IN CHICKENS POSCA 34(5), 1089-1092 OTHER IRRADIATION, REPRODUCTION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1923

4654. LUCAS, A.M. 1946 HEMATOLOGY OF BLOOD SPOTS IN EGGS OF WHITE LEGHORN CHICKENS AJANA 79(3), 431-472 L/S HEMATOLOGY, BLOOD LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1924

4655. LUCAS, A.M. 1946 HEMATOLOGY OF BLOOD SPOTS IN THE CHICKEN EGG AND ITS BEARING ON DIFFERENTIAL COUNTS AND MACROPHAGE DEVELOPMENT ANREA 94, 480-480 L/S HEMATOLOGY, MACROPHAGE LIB UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1834

4656. LUCAS, A.M. 1947 INTRANUCLEAR INCLUSIONS IN THE ISLANDS OF LANGERHANS OF CHICKENS AJPAA 23(6), 1005-1021 L/S ENDOCRINE GLAND, INCLUSION BODY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1925

4657. LUCAS, A.M. 1949 COMPARISON OF LYMPHOID TISSUES IN PANCREAS OF DUCKS AND CHICKENS AND THE RELATIONSHIP OF LYMPHOMATOSIS ANREA 103, 485-485 HV MD, PANCREAS, DUCK LIB UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2129

4658. LUCAS, A.M. 1949 LYMPHOID TISSUE AND ITS RELATION TO SO-CALLED NORMAL LYMPHOID FOCI AND TO LYMPHOMATOSIS. I. QUALITATIVE STUDY OF LYMPHOID AREAS IN THE PANCREAS OF CHICKENS AJPAA 25(6), 1197-1213 L/S LL, PANCREAS, LYMPHOID FOCI LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1926 L

4659. LUCAS, A.M. 1950 FURTHER STUDIES ON ECTOPIC LYMPHOID FOCI IN BIRDS ANREA 106, 218-218 L/S LYMPHOID FOCI LIB UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2264

4660. LUCAS, A.M. 1950 LYMPHOID TISSUE AND ITS RELATION TO SO-CALLED NORMAL LYMPHOID FOCI AND TO LYMPHOMATOSIS. V. A STUDY OF LYMPHOID AREAS IN THE PANCREAS OF PHEASANTS ANDWILD MALLARD DUCKS POSCA 29(3), 452-461 L/S LL, PHEASANT, DUCK, LYMPHOID FOCI LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY L

Appendix

Appendix 2

RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1927

4661. LUCAS. A.M. 1951 LYMPHOID TISSUE AND ITS RELATION TO SO-CALLED NORMAL LYMPHOID FOCI AND TO LYMPHOMATOSIS. VI. A STUDY OF LYMPHOID AREAS IN THE PANCREAS OF DOVES AND PIGEONS POSCA 30(1). 116-124 L/S LYMPHOID FOCI. LL. DOVE. PIGEON LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1928

4662. LUCAS. A.M. 1951 OCCURRENCE OF TWO TYPES OF INTRANUCLEAR INCLUSIONS IN THE PANCREAS OF TURKEYS. OF WHICH ONE SUGGESTS A VIRUS INFECTION POSCA 30(5). 635-644 L/S INCLUSION BODY. TURKEY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1929

4663. LUCAS. A.M. 1959 A DISCUSSION OF SYNONYMY IN AVIAN AND MAMMALIAN HEMATOLOGICAL NOMENCLATURE AJVRA 20(78). 887-897 OTHER REVIEW. TERMINOLOGY. HEMATOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0396

4673. LUCAS. A.M.. BREITMAYER. JANET B. 1949 LYMPHOID TISSUE AND ITS RELATION TO SO-CALLED NORMAL LYMPHOID FOCI AND TO LYMPHOMATOSIS. III. QUALITATIVE AND QUANTITATIVE COMPARISON OF LYMPHOID AREAS IN THE PANCREAS OF THE WHITE PEKIN DUCK WITH THOSE IN CHICKENS POSCA 28(3). 436-445 L/S LL. LYMPHOID FOCI. PANCREAS. DUCK LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1933

4674. LUCAS. A.M.. CRAIG. C.C.. OAKBERG. E.F. 1949 LYMPHOID TISSUE AND ITS RELATION TO SO-CALLED NORMAL LYMPHOID FOCI AND TO LYMPHOMATOSIS. IV. SIMPLIFICATION OF METHODS FOR QUANTITATIVE ANALYSES AND ITS APPLICATION TO THE TURKEY GROWA 13. 339-357 L/S LYMPHOID FOCI. LL. TURKEY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1930

4675. LUCAS. A.M.. DENINGTON. EFFIE M. 1956 MORPHOLOGY OF THE CHICKEN LIVER POSCA 35(4). 793-806 L/S MORPHOLOGY. LIVER LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1931

4676. LUCAS. A.M.. DENINGTON. EFFIE M. 1957 EFFECT OF IRRADIATION ON THE BLOOD OF FEMALE CHICKENS ANREA 127. 472-473 OTHER BLOOD. SEX. IRRADIATION LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3530

4677. LUCAS. A.M.. DENINGTON. EFFIE M. 1957 EFFECT OF TOTAL BODY X-RAY IRRADIATION ON THE BLOOD OF FEMALE SINGLE COMB WHITE LEGHORN CHICKENS POSCA 36(6). 1290-1310 OTHER BLOOD. CONTROL - IRRADIATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2988

4678. LUCAS. A.M.. DENINGTON. EFFIE M. 1958 THE STATISTICAL RELIABILITY OF DIFFERENTIAL COUNTS OF CHICKEN BLOOD POSCA 37(3). 544-549 OTHER BLOOD. CELL CULTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2989

4679. LUCAS. A.M.. DENINGTON. EFFIE M. 1961 AIR SACS - THEIR DISTRIBUTION AND MICROSCOPIC STRUCTURE RESEARCH CONFERENCE ON DISEASE. ENVIRONMENTAL. AND MANAGEMENT FACTORS RELATED TO POULTRY HEALTH. UNITED STATES DEPARTMENT OF AGRICULTURE CIRCULAR (45-2). PAGES 32-38 OTHER AIR. STRUCTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3535

4680. LUCAS. A.M.. DENINGTON. EFFIE M. 1961 A BRIEF DISCUSSION OF NORMAL AND ABNORMAL AVIAN BLOOD CELLS AVDIA 5(4). 454-455 L/S BLOOD. NORMAL CELL. ABNORMALITY. ERYTHROBLASTOSIS. RPL12. BONE MARROW LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE

Appendix 2

AMERICAN SOCIETY OF MICROBIOLOGY. MIAMI BEACH. FLORIDA. MAY 6-11. PAGES 218-218 L/S AGGLUTINATION. SEROLOGICAL TESTING. MURINE LEUKEMIA VIRUS. MOUSE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823. WORK DONE: MAX PLANCK INSTITUTE FOR VIRUS RESEARCH. TUBINGEN. WEST GERMANY 3720

8428. WITTER. R.L.. FRANK. H.. MOENNIG. V.. HUNSMANN. G.. LANGE. J.. SCHAFER. W. 1973 PROPERTIES OF MOUSE LEUKEMIA VIRUSES. IV. HEMAGGLUTINATION ASSAY AND CHARACTERIZATION OF HEMAGGLUTINATING SURFACE COMPONENTS VIRLA 54(2). 330-345 L/S MURINE LEUKEMIA VIRUS. MOUSE. AGGLUTINATION LIB-RP-OK WORK DONE: MAX PLANCK INSTITUTE FOR VIRUS RESEARCH. TUBINGEN. GERMANY. PERMANENT: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2783

8429. WITTER. R.L.. HUNSMANN. G.. LANGE. J.. SCHAFER. W. 1973 PROPERTIES OF MOUSE LEUKEMIA VIRUSES. V. HEMAGGLUTINATION-INHIBITION AND INDIRECT HEMAGGLUTINATION TESTS VIRLA 54(2). 346-358 L/S MURINE LEUKEMIA VIRUS. MOUSE. AGGLUTINATION LIB-RP-OK WORK DONE: MAX PLANCK INSTITUTE FOR VIRUS RESEARCH. TUBINGEN. GERMANY. PERMANENT: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2780

8430. WITTER. R.L.. MOULTHROP. J.I.. BURGOYNE. G.H.. CONNELL. H.E. 1969 EPIDEMIOLOGY OF MAREK'S DISEASE HERPESVIRUS IN BROILER FLOCKS PROCEEDINGS OF THE 106TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. MINNEAPOLIS. MINNESOTA. JULY 13-17. PAGES 148-148 HV MD. EPIZOOTIOLOGY. BROILER LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3540

8431. WITTER. R.L.. MOULTHROP. J.R.. JR.. BURGOYNE. G.H.. CONNELL. H.C. 1970 STUDIES ON THE EPIDEMIOLOGY OF MAREK'S DISEASE HERPESVIRUS IN BROILER FLOCKS AVDIA 14(2). 255-267 HV MD. EPIDEMIOLOGY. BROILER LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0694 M

8432. WITTER. R.L.. NAZERIAN. K.. PURCHASE. H.G.. BURGOYNE. G.H. 1970 ISOLATION FROM TURKEYS OF A CELL-ASSOCIATED HERPESVIRUS ANTIGENICALLY RELATED TO MAREK'S DISEASE VIRUS AJVRA 31(3). 525-538: MAREK'S DISEASE. I: GENETICS AND VIROLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 168-194. 1974 HV MD. HVT. TURKEY. ANTIGEN. VIRUS ISOLATION LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0596 MM

8433. WITTER. R.L.. NAZERIAN. K.. SOLOMON. J.J. 1972 STUDIES ON THE IN VIVO REPLICATION OF TURKEY HERPESVIRUS JNCIA 49(4). 1121-1130 HV HVT. TURKEY. VIRUS SYNTHESIS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2483 M

8434. WITTER. R.L.. PURCHASE. H.G.. BURGOYNE. G.H. 1970 PERIPHERAL NERVE LESIONS SIMILAR TO THOSE OF MAREK'S DISEASE IN CHICKENS INOCULATED WITH RETICULOENDOTHELIOSIS VIRUS JNCIA 45(3). 567-577 HV. RE REV. MD. PATHOLOGY. NERVE. TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0867

8435. WITTER. R.L.. SHARMA. J.M. 1973 INTERACTIONS BETWEEN HAMSTER AND AVIAN CELLS INFECTED WITH MAREK'S DISEASE VIRUS (MDV) AND TURKEY HERPESVIRUS (HVT) PROCEEDINGS OF THE 54TH CONFERENCE OF RESEARCH WORKERS IN ANIMAL DISEASES. CHICAGO. ILLINOIS. NOVEMBER 26-27. PAGES 2-2 HV MD. HVT. HAMSTER. CELL CULTURE. CELL FREE VIRUS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3727

8436. WITTER. R.L.. SHARMA. J.M. 1974 TRANSIENT INFECTION AND HETEROKARYON FORMATION IN HAMSTER CELL CULTURES INOCULATED WITH CELL-ASSOCIATED MAREK'S DISEASE VIRUS AND TURKEY HERPESVIRUS PROCEEDINGS OF THE 111TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. DENVER. COLORADO. JULY 22-25. PAGES 138-138 HV MD. HVT. HAMSTER. CELL

Appendix 2

ROAD. EAST LANSING. MI 48823 3036

4681. LUCAS. A.M.. DENINGTON. EFFIE M. 1961 A BRIEF REPORT ON ANATOMY. HISTOLOGY. AND REACTIVITY OF AIR SACS IN THE FOWL AVDIA 5(4). 460-461 OTHER HISTOPATHOLOGY. AIR. REACTIVATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3035

4683. LUCAS. A.M.. JAMROZ. C. 1961 ATLAS OF AVIAN HEMATOLOGY UNITED STATES DEPARTMENT OF AGRICULTURE MONOGRAPH (25). 1-271 L/S BLOOD. BLOOD GROUP. HEMATOLOGY. CLASSIFICATION. TECHNIQUE. CELL CULTURE. BONE MARROW. CHICK EMBRYO. HEMOGLOBIN. HEMOLYSIN LIB-RP-BK-OK (RB145 .A74) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2696 LM

4684. LUCAS. A.M.. KEERAN. ROLLA J.. COUSSENS. C.F. 1959 AIR SACS OF CHICKEN. TURKEY. DUCK AND OWL ANREA 133. 452-452 OTHER AIR. TURKEY. DUCK. OWL LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3533

4685. LUCAS. A.M.. OAKBERG. E.F. 1950 LYMPHOID TISSUE AND ITS RELATION TO SO-CALLED NORMAL LYMPHOID FOCI AND TO LYMPHOMATOSIS. II. QUANTITATIVE ANALYSIS OF LYMPHOID AREAS IN THE PANCREAS OF LABORATORY AND FARM CHICKENS AJPAA 26(1). 75-111 L/S LL. ENDOCRINE GLAND. LYMPHOID FOCI LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1932

4686. LUCAS. A.M.. STETTENHEIM. P.. DENINGTON. EFFIE M.. JAMROZ. C. 1962 MORPHOLOGY OF FEATHER MUSCLES IN THE CHICKEN ANREA 142. 253-254 OTHER MORPHOLOGY. FEATHER FOLLICLE. MUSCLE LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3536

4692. LUDFORD. C.G.. PURCHASE. H.G.. COX. H.W. 1972 DUCK INFECTIOUS ANEMIA VIRUS ASSOCIATED WITH PLASMODIUM LOPHURAE EXPAA. 31. 29-38 RE DIAV. DUCK. PLASMODIUM LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1492 R

4743. MAAG. T.A.. BURMESTER. B.R. 1955 THE DEVELOPMENT OF A HEMORRHAGIC SYNDROME IN A STRAIN OF VISCERAL LYMPHOMATOSIS POSCA 34(5). 1208-1208 L/S. HV LL. MD. HEMORRHAGE. PATHOLOGY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3075

4882. MARTIN. J.H. 1939 THE CHALLENGE OF POULTRY MORTALITY TO THE VETERINARY PROFESSION JAVMA 34(12). 687-689 OTHER MORTALITY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2993

4883. MARTIN. J.H. 1939 MEETING THE POULTRY MORTALITY PROBLEM NATIONAL POULTRY DIGEST 1. 227-230 HV. L/S MD. L/S . REVIEW. MORTALITY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1205

4884. MARTIN. J.H. 1940 HEREDITY AND AVIAN LYMPHOMATOSIS POSCA 19(2). 103-105 L/S GENETICS. LL LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1935

4885. MARTIN. J.H. 1940 U.S.D.A. BEGINS A STUDY OF PARALYSIS POULTRY TRIBUNE 46. 50-52 HV. L/S MD. L/S . REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1204

5280. MUHM. R.L.. BURMESTER. B.R. 1969 A SURVEY OF ETIOLOGIC FACTORS OF MAREK'S DISEASE XAARA PUBLICATION 91-81. PAGES

21-25 HV MD. SURVEY EPIZOOTIOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0532

5358. NAZERIAN. K. 1968 ELECTRON MICROSCOPY OF A HERPESVIRUS ISOLATED FROM MAREK'S DISEASE IN DUCK AND CHICKEN EMBRYO FIBROBLAST CULTURES PROCEEDINGS OF THE ELECTRON MICROSCOPY SOCIETY OF AMERICA 26. 222-223 HV ULTRASTRUCTURE. MD. DUCK. CELL CULTURE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0186 MM

5359. NAZERIAN. K. 1968 MAREK'S DISEASE (MD) AGENT IN CELL CULTURE PAACA 9. 53-53 HV MD. CELL CULTURE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3723 MM

5360. NAZERIAN. K. 1969 SITE OF REPLICATION OF MAREK'S DISEASE VIRUS BIHAA (36) 210-212 HV MD. ULTRASTRUCTURE LIB-RP UNITED STATES DEPARTMENT OF AGRICUTLURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1688 MM

5361. NAZERIAN. K. 1970 ATTENUATION OF MAREK'S DISEASE VIRUS AND STUDY OF ITS PROPERTIES IN TWO DIFFERENT CELL CULTURES JNCIA 44. 1257-1267 HV MD. CELL CULTURE. ATTENUATED VIRUS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0825 M

5362. NAZERIAN. K. 1970 IN VIVO AND IN VITRO REPLICATION OF MAREK'S DISEASE VIRUS: ULTRASTRUCTURAL STUDIES PROCEEDINGS OF THE 7TH INTERNATIONAL CONGRESS OF ELECTRON MICROSCOPY. GRENOBLE. FRANCE. PAGES 939-940 HV MD. VIRUS SYNTHESIS. ULTRASTRUCTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3527 MM

5363. NAZERIAN. K. 1971 FURTHER STUDIES ON THE REPLICATION OF MAREK'S DISEASE VIRUS IN THE CHICKEN AND IN CELL CULTURE JNCIA 47(1). 207-217 HV MD. VIRUS SYNTHESIS. CELL CULTURE. ULTRASTRUCTURE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1859 M

5364. NAZERIAN. K. 1971 VIROLOGY AND IMMUNOLOGY OF MAREK'S DISEASE ONCOGENESIS AND HERPES-TYPE VIRUSES (ABSTRACT OF PAPERS). CAMBRIDGE. ENGLAND. JUNE 20-25. PAGES 9-9 HV MD. IMMUNOLOGY. CELL CULTURE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3061

5365. NAZERIAN. K. 1972 VIROLOGY AND IMMUNOLOGY OF MAREK'S DISEASE. A REVIEW ONCOGENESIS AND HERPESVIRUSES. INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. LYON. FRANCE. SCIENTIFIC PUBLICATIONS (2). 59-73 HV MD. IMMUNOLOGY. REVIEW LIB-RP-BK-OK (QR361 .I5) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2517

5366. NAZERIAN. K. 1973 MAREK'S DISEASE: A NEOPLASTIC DISEASE OF CHICKENS CAUSED BY A HERPESVIRUS ACRSA 17. 279-315 HV MD. HERPESVIRUS. NEOPLASM LIB-RP-BK-OK (RC267 .A3) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3215

5367. NAZERIAN. K. 1973 ONCOGENESIS OF MAREK'S DISEASE CNREA 33(6). 1427-1430 HV MD. ONCOGENESIS. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2965

5368. NAZERIAN. K. 1973 STUDIES ON INTRACELLULAR AND MEMBRANE ANTIGENS INDUCED BY MAREK'S DISEASE VIRUS JGVIA 21(PART 1). 193-195 HV MD. CELL SURFACE. ANTIGEN. CELL CULTURE. FLUORESCENT ANTIBODY. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2947

Appendix 2

Appendix 2

5369. NAZERIAN. K. 1974 DNA CONFIGURATION IN THE CORE OF MAREK'S DISEASE VIRUS JOVIA 13(5). 1148-1150 HV MD. DNA. ULTRASTRUCTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3272 MM

5387. NAZERIAN. K.., BURMESTER. B.R. 1968 ELECTRON MICROSCOPY OF A HERPES VIRUS ASSOCIATED WITH THE AGENT OF MAREK'S DISEASE IN CELL CULTURE CNREA 28. 2454-2462 HV ULTRASTRUCTURE. MD. CELL CULTURE. DUCK. DNA LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0187 MM

5388. NAZERIAN. K.. CHEN. J.H. 1973 IMMUNOFERRITIN STUDIES OF MAREK'S DISEASE VIRUS DIRECTED INTRACELLULAR AND MEMBRANE ANTIGENS AGVIA 41(1-2). 59-65 HV MD. IMMUNOFERRITIN TECHNIQUE. CELL SURFACE LIB-RP-OK WORK DONE: KAROLINSKA INSTITUTE. DEPARTMENT OF TUMOR BIOLOGY. STOCKHOLM 60. SWEDEN. PRESENT: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2966 M

5389. NAZERIAN. K.. CHEN. J.H.. LEE. LUCY F. 1973 A COMPARATIVE STUDY OF MAREK'S DISEASE VIRUS PROTEINS BIHAA. "UNIFYING CONCEPTS OF LEUKEMIA". EDITED BY DUTCHER. R.M.. CHIECO-BIANCHI. L.; PUBLISHED BY S. KARGER. BASEL. SWITZERLAND: (39). 518-523 HV MD. PROTEIN. ELECTROPHORESIS. ANTIGEN. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3432 M

5390. NAZERIAN. K.. LEE. LUCY F.. KATO. S. DEOXYRIBONUCLEIC ACID OF MAREK'S DISEASE VIRUS IN A LYMPHOBLASTOID CELL LINE FROM MAREK'S DISEASE TUMORS HV MD. DNA. GENOME LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3454 MM

5391. NAZERIAN. K.. LEE. LUCY F.. WITTER. R.L.. BURMESTER. B.R. 1971 ULTRASTRUCTURAL STUDIES OF A HERPESVIRUS OF TURKEYS ANTIGENICALLY RELATED TO MAREK'S DISEASE VIRUS VIRLA 43(2). 442-452 HV ULTRASTRUCTURE. HVT. MD. ANTIGEN LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1431 M

5392. NAZERIAN. K.. LINDAHL. T. 1973 DNA OF MAREK'S DISEASE VIRUS (MDV) IN VIRUS-INDUCED TUMORS MEETING OF THE HERPES VIRUSES (ABSTRACTS OF PAPERS). COLD SPRING HARBOR LABORATORY. NEW YORK. AUGUST 17-20. PAGES 32-32 HV MD. VIRUS INDUCTION. CELL CULUTRE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823. WORK DONE: KAROLINSKA INSTITUTE. DEPARTMENTS OF TUMOR BIOLOGY AND CHEMISTRY. STOCKHOLM. SWEDEN 3702

5393. NAZERIAN. K.. LINDAHL. T.. KLEIN. G.. LEE. LUCY F. 1973 DEOXYRIBONUCLEIC ACID OF MAREK'S DISEASE VIRUS IN VIRUS-INDUCED TUMORS JOVIA 12(4). 841-846 HV MD. DNA. HYBRIDIZATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3232 MM

5394. NAZERIAN. K.. PURCHASE. H.G. 1970 COMBINED FLUORESCENT-ANTIBODY AND ELECTRON MICROSCOPY STUDY OF MAREK'S DISEASE VIRUS-INFECTED CELL CULTURE JOVIA 5(1). 79-90 HV FLUORESCENT ANTIBODY. ULTRASTRUCTURE. MD. CELL CULTURE. ANTIGEN LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0567 M

5395. NAZERIAN. K.. PURCHASE. H.G.. BURMESTER. B.R. ULTRASTRUCTURAL FEATURES OF GONAD TUMORS FROM BIRDS WITH MAREK'S DISEASE UNPUBLISHED HV MD. ULTRASTRUCTURE. GONAD LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1880

5396. NAZERIAN. K.. SHARMA. J.M. 1974 DETECTION OF T-CELL SURFACE MARKERS IN A MAREK'S DISEASE LYMPHOBLASTOID CELL LINE HV MD. CELL SURFACE. MARKER LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3616 MM

Appendix 2

5397. NAZERIAN. K.. SOLOMON. J.J.. WITTER. R.L.. BURMESTER. B.R. 1968 STUDIES ON THE ETIOLOGY OF MAREK'S DISEASE. II. FINDING OF A HERPESVIRUS IN CELL CULTURE PSEBA 127. 177-182 HV MD. CELL CULTURE. HERPESVIRUS. ULTRASTRUCTURE. DNA LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0448 MM

5398. NAZERIAN. K.. SPRANDEL. BARBARA J.. PURCHASE. H.G. 1969 LOCALIZATION OF MAREK'S DISEASE HERPESVIRUS AND ITS ANTIGEN BY ELECTRON MICROSCOPY AND FLUORESCENT ANTIBODY TECHNIQUES THE 27TH ANNUAL PROCEEDINGS OF THE ELECTRON MICROSCOPY SOCIETY OF AMERICA HV MD. ULTRASTRUCTURE. FLUORESCENT ANTIBODY. VIRUS SYNTHESIS. ANTIGEN LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0313

5399. NAZERIAN. K.. WITTER. R.L. 1970 CELL-FREE TRANSMISSION AND IN VIVO REPLICATION OF MAREK'S DISEASE VIRUS JOVIA 5(3). 388-397: MAREK'S DISEASE. I: GENETICS AND VIROLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 195-214. 1974 HV MD. TRANSMISSION EXPERIMENT. CELL FREE VIRUS. VIRUS SYNTHESIS LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0355 MM

5400. NAZERIAN. K.. WITTER. R.L. 1970 IN VIVO REPLICATION OF MAREK'S DISEASE VIRUS (MDV) BACPA. PAGE 178 HV MD. VIRUS SYNTHESIS. HVT. VIRUS SYNTHESIS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0643

5401. NAZERIAN. K.. WITTER. R.L. 1974 PROPERTIES OF A CHICKEN LYMPHOBLASTOID CELL LINE FROM MAREK'S DISEASE TUMOR HV MD. ULTRASTRUCTURE LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1678 M

5402. NAZERIAN. K.. WITTER. R.L.. SOLOMON. J.J. 1968 HIGHLIGHTS OF RESEARCH ON THE ETIOLOGY OF MAREK'S DISEASE PROCEEDINGS OF THE 17TH WESTERN POULTRY DISEASE CONFERENCE. DAVIS. CALIFORNIA. MARCH 19-20. PAGES 3-4 HV MD. TRANSMISSION EXPERIMENT. TRANSMISSION - AIRBORNE. TRANSMISSION - CONTACT LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3722

5419. NELSON. N.M. 1940 FINDINGS IN FOWL PARALYSIS (LEUKOSIS COMPLEX) JAVMA 97. 556-556 HV MD. PATHOLOGY LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0709

5420. NELSON. N.M. 1941 COLOR PHOTOGRAPHY AND ITS APPLICATION TO VETERINARY MEDICINE AJVRA 2. 126-128 OTHER REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3003

5421. NELSON. N.M. 1941 FIELD DIAGNOSIS OF THE AVIAN-LEUKOSIS COMPLEX MCVTA 1. 38-41 L/S. HV L/S . MD. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1227

5422. NELSON. N.M. 1941 FIELD DIAGNOSIS OF THE AVIAN-LEUKOSIS COMPLEX. II. GROSS PATHOLOGY MCVTA 1. 125-127 L/S. HV L/S . MD. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1226

5423. NELSON. N.M. 1942 THE SCLEROTIC PLATES OF THE WHITE LEGHORN CHICKEN ANREA 84(3). 295-306 OTHER EYE. STRUCTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2972

5424. NELSON. N.M. 1944 FEED INFLUENCE ON EYE COLOR IN WHITE LEGHORN CHICKENS POSCA 23(6). 541-542 OTHER GENETICS. EYE. NUTRITION. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL

POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2976

5425. NELSON. N.M. 1945 ORBITAL DEFORMITY AND VISUAL IMPAIRMENT DUE TO LOPPING OF THE COMB IN THE CHICKEN ANREA 92(1). 77-79 OTHER GENETICS. EYE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2980

5426. NELSON. N.M. 1946 LEIOMYOMA OF THE VENTRAL LIGAMENT OF THE OVIDUCT OF THE CHICKEN AJPAA 22(5). 1047-1057 L/S LEIOMYOMA. OVIDUCT. GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2982

5427. NELSON. N.M. 1947 NORMAL EYE COLOR IN THE CHICKEN POSCA 26(1). 61-66 OTHER EYE. GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3005

5431. NELSON. N.M.. THORP. F.. JR. 1943 OCULAR LYMPHOMATOSIS. WITH SPECIAL REFERENCE TO CHROMATISM OF THE IRIDES AJVRA 4(12). 294-304 L/S LL. EYE. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2974

5492. OAKBERG. E.F. 1949 QUANTITATIVE STUDIES ON THE PANCREAS AND ISLANDS OF LANGERHANS IN RELATION TO AGE. SEX. AND BODY WEIGHT IN WHITE LEGHORN CHICKENS AJANA 84(2). 279-310 OTHER AGE. SEX. WEIGHT. PANCREAS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3009

5493. OAKBERG. E.F. 1950 DISTRIBUTION AND AMOUNT OF LYMPHOID TISSUE IN SOME OF THE SPLANCHNIC NERVES OF CHICKENS IN RELATION TO AGE. SEX AND INDIVIDUAL CONSTITUTION POSCA 29(3). 420-436 L/S LL. AGE. SEX. SPLEEN LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3012

5494. OAKBERG. E.F. 1951 GENETIC DIFFERENCES IN QUANTITATIVE HISTOLOGY OF THE ADRENAL. ORGAN WEIGHTS. AND INTER-ORGAN CORRELATIONS IN WHITE LEGHORN CHICKENS GROWA 25(392). 57-78 OTHER GENETICS. HISTOPATHOLOGY. ADRENAL GLAND. WEIGHT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3016

5495. OAKBERG. E.F. 1951 INFLUENCE OF GENETIC CONSTITUTION ON GROWTH OF LYMPHOID TISSUE IN LIVER AND PANCREAS OF WHITE LEGHORN CHICKENS. AND CORRELATION OF LYMPHOID TISSUES WITH WEIGHTS OF SOME VISCERAL AND ENDOCRINE ORGANS GROWA 25(393). 79-100 L/S LL. GROWTH RATE. LIVER. PANCREAS. WEIGHT. ENDOCRINE ORGAN. GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3015

5498. OAKBERG. E.F.. LUCAS. A.M. 1949 EFFECT OF AGE. SEX AND INDIVIDUAL VARIABILITY ON LYMPHOID TISSUE OF THE PANCREAS IN WHITE LEGHORN CHICKENS POSCA 28(5). 675-685 OTHER LYMPHOID SYSTEM. LYMPHOID FOCI. REVIEW. AGE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1425

5499. OAKBERG. E.F.. LUCAS. A.M. 1949 VARIATIONS IN BODY WEIGHT AND ORGAN: BODY-WEIGHT RATIONS OF INBRED LINES OF WHITE LEGHORN CHICKENS IN RELATION TO MORTALITY. ESPECIALLY FROM LYMPHOMATOSIS GROWA 13. 319-337 L/S LL. PATHOLOGY. WEIGHT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1631

5603. OKAZAKI. W.. PURCHASE. H.G.. BURMESTER. B.R. 1970 PROTECTION AGAINST MAREK'S DISEASE BY VACCINATION WITH A HERPESVIRUS OF TURKEYS AVDIA 14(2). 413-429: MAREK'S DISEASE. II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 287-303. 1973 HV MD. IMMUNIZATION. CONTROL - VACCINATION. HVT LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL

Appendix 2

RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0828

5604. OKAZAKI, W., PURCHASE, H.G., BURMESTER, B.R. 1971 THE TEMPORAL RELATIONSHIP BETWEEN VACCINATION WITH THE HERPESVIRUS OF TURKEYS AND CHALLENGE WITH VIRULENT MAREK'S DISEASE VIRUS AVDIA 15(4), 753-761; MAREK'S DISEASE, II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION, NEW YORK, PAGES 260-268, 1974 HV MD, HVT, CONTROL - VACCINATION LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2100 MM

5605. OKAZAKI, W., PURCHASE, H.G., BURMESTER, B.R. 1973 VACCINATION AGAINST MAREK'S DISEASE: POSSIBLE CAUSES OF FAILURE OF HERPESVIRUS OF TURKEYS (STRAIN FC126) TO PROTECT CHICKENS AGAINST MAREK'S DISEASE AJVRA 34(6), 813-817 HV MD, CONTROL - VACCINATION, CONTROL - DISEASE, HVT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2901 M

5606. OKAZAKI, W., PURCHASE, H.G., BURMESTER, B.R. 1974 A PHENOTYPIC MIXING TEST FOR THE DETECTION AND ASSAY OF AVIAN LEUKOSIS VIRUS PROCEEDINGS OF THE 111TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION, DENVER, COLORADO, JULY 22-25, PAGES 136-136 L/S RSV, PHENOTYPIC MIXING, SUBGROUP LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3707 L

5607. OKAZAKI, W., PURCHASE, H.G., FREDRICKSON, T.N., BURMESTER, B.R. 1962 MODIFICATION OF COMPLEMENT FIXATION TEST FOR ESTIMATION OF ROUS SARCOMA VIRUS ANTIBODIES IN TURKEY AND CHICKEN SERUMS PSEBA 111, 377-380 L/S RSV, COFAL TEST, COMPLEMENT FIXATION, ANTIBODY, TURKEY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1279 L

5608. OKAZAKI, W., PURCHASE, H.G., GARRIDO, C. 1972 THE IN VITRO ASSAY OF THE HERPESVIRUS OF TURKEYS PILSA 5, 126-131 HV MD, CONTROL - VACCINATION, HVT, VIRUS TITRATION, CELL FREE VIRUS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1725 M

5609. OKAZAKI, W., PURCHASE, H.G., NOLL, L. 1970 EFFECT OF DIFFERENT CONDITIONS ON PRECIPITATION IN AGAR BETWEEN MAREK'S DISEASE ANTIGEN AND ANTIBODY AVDIA 14(3), 532-537 HV MD, IMMUNODIFFUSION, ANTIGEN, ANTIBODY, PRECIPITATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0833 M

5761. PATERSON, J.C., COTTRAL, G.E. 1950 EXPERIMENTAL CORONARY SCLEROSIS, III. LYMPHOMATOSIS AS A CAUSE OF CORONARY SCLEROSIS IN CHICKENS ARPAA 49, 699-709 LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2012

5762. PATERSON, J.C., SLINGER, S.J., GARTLEY, K.M., MITCHELL, C.A., WALLACE, A.C., COTTRAL, G.E. 1949 CORONARY SCLEROSIS IN CHICKENS POSCA 28(5), 779-780 OTHER HEART LIB-RP-ABSTR-OK WORK DONE: UNIVERSITY OF WESTERN ONTARIO, LONDON, ONTARIO, CANADA; ONTARIO AGRICULTURAL COLLEGE, GUELPH, ONTARIO, CANADA; DOMINION DEPARTMENT OF AGRICULTURE, HULL, QUEBEC, CANADA; UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823. PRESENT: G.E. COTTRAL, UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3071

5829. PAYNE, L.N., CRITTENDEN, L.B., OKAZAKI, W. 1968 INFLUENCE OF HOST GENOTYPE ON RESPONSES TO FOUR STRAINS OF AVIAN LEUKOSIS VIRUS JNCIA 40(5), 907-916 L/S CELL CULTURE, RSV, COFAL TEST, RESISTANCE - GENETIC LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0189 LL

5887. PETERSON, R.D.A. BURMESTER, B.R., FREDRICKSON, T.N., GOOD, R.A. 1963 PREVENTION OF LYMPHATIC LEUKEMIA IN THE CHICKEN L

Appendix 2

Appendix 2

BY THE SURGICAL REMOVAL OF THE BURSA OF FABRICIUS PROCEEDINGS OF THE 36TH ANNUAL MEETING OF THE CENTRAL SOCIETY FOR CLINICAL RESEARCH. CHICAGO. ILLINOIS. NOVEMBER 1-2. 36. 56-56 L/S BURSA OF FABRICIUS. BURSECTOMY LIB-RP-ABSTR-OK WORK DONE: UNIVERSITY OF MINNESOTA. VARIETY CLUB HEART HOSPITAL. PEDIATRIC RESEARCH LABORATORIES. MINNEAPOLIS. MN 55455; UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823. PRESENT: B.R. BURMESTER. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3039

5907. PIRAINO. F.F.. FREDRICKSON. T.N.. OKAZAKI. W.. BURMESTER. B.R. 1961 A SHORT TERM ASSAY OF STRAIN RPL 12 FOWL TUMOR VIRUS BY THE INTRAVENOUS INOCULATION OF CHICKEN EMBRYOS POSCA 40(5). 1444-1444 L/S VIRUS SYNTHESIS. RPL12. CONTROL - VACCINATION. CHICK-EMBRYO. ERYTHROBLASTOSIS. MORTALITY. NEOPLASM LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3082 LL

5909. PIRAINO. F.F.. OKAZAKI. W.. BURMESTER. B.R.. FREDRICKSON. T.N. 1963 BIOASSAY OF FOWL LEUKOSIS VIRUS IN CHICKENS BY THE INOCULATION OF 11-DAY-OLD EMBRYOS VIRLA 21(3). 396-401 L/S LL. VIRUS TITRATION. ERYTHROBLASTOSIS. EMBRYO INOCULATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0603 LL

6013. PURCHASE. H.G. 1965 ROUS SARCOMA AND ITS HELPER VIRUSES (A REVIEW) AVDIA 9(1). 127-145 L/S RSV. HELPER VIRUS. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1429

6014. PURCHASE. H.G. 1966 THE EPIZOOTIOLOGY OF THE AVIAN LEUKOSIS COMPLEX COMPARATIVE LEUKAEMIA RESEARCH. PERGAMON PRESS. OXFORD. ENGLAND. PAGES 209-220 L/S. HV LL. MD. EPIZOOTIOLOGY. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0602

6015. PURCHASE. H.G. 1967 A METHOD FOR MULTIPLE SKIN GRAFTING POSCA 46(4). 1017-1019 OTHER TECHNIQUE. TRANSPLANTATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1878 LM

6016. PURCHASE. H.G. 1968 APPLICATION OF IMMUNOFLUORESCENCE TO THE DETECTION OF MAREK'S DISEASE ANTIGEN AND ANTIBODY PROCEEDINGS OF THE 105TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICINE ASSOCIATION. BOSTON. MASSACHUSETTS. JULY 21-25. PAGES 141-141 HV MD. FLUORESCENT ANTIBODY. ANTIGEN LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3053

6017. PURCHASE. H.G. 1969 THE CYCLE OF INFECTION WITH LEUKOSIS VIRUSES JSAVA 40(1). 25-30 L/S LL. RSV. ANTIBODY. ANTIGEN. BURSA OF FABRICIUS. GENETICS. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0192

6018. PURCHASE. H.G. 1969 DETECTION OF VIRUS-SPECIFIC ANTIGEN IN MAREK'S DISEASE-INFECTED BIRDS BY IMMUNOFLUORESCENCE PROCEEDINGS OF THE 106TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. MINNEAPOLIS. MINNESOTA. JULY 13-17. PAGES 151-151 HV MD. FLUORESCENT ANTIBODY. ANTIGEN - VIRUS SPECIFIC LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3541

6019. PURCHASE. H.G. 1969 IMMUNOFLUORESCENCE IN THE STUDY OF MAREK'S DISEASE. I. DETECTION OF ANTIGEN IN CELL CULTURE AND AN ANTIGENIC COMPARISON OF EIGHT ISOLATES JOVIA 3(6). 557-565 HV MD. ANTIGEN. CELL CULTURE. FLUORESCENT ANTIBODY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0293 MM

6020. PURCHASE, H.G. 1970 THE POTENTIAL FOR A SATISFACTORY MAREK'S DISEASE VACCINE POULTRY DIGEST 29, 532-534 HV MD, FIELD TRIAL, CONTROL - VACCINATION, HVT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2998

6021. PURCHASE, H.G. 1970 RECENT PROGRESS WITH THE HERPESVIRUS OF TURKEYS VACCINE AGAINST MAREK'S DISEASE ELEVENTH POULTRY PATHOLOGISTS' CONFERENCE, HOLIDAY INN, TRENTON, NEW JERSEY, NOVEMBER 10-13, 69-70 HV HVT, MD, CONTROL - VACCINATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1433

6022. PURCHASE, H.G. 1970 VIRUS-SPECIFIC IMMUNOFLUORESCENT AND PRECIPITIN ANTIGENS AND CELL-FREE VIRUS IN THE TISSUES OF BIRDS INFECTED WITH MAREK'S DISEASE CNREA 30(6), 1898-1908: MAREK'S DISEASE, II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION, NEW YORK, PAGES 166-195, 1974 HV MD, FLUORESCENT ANTIBODY, IMMUNODIFFUSION, ANTIGEN, VIRUS HOST CELL RELATIONSHIP, CELL FREE VIRUS LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0834

MM

6023. PURCHASE, H.G. 1971 BIOLOGICAL MARKERS FOR PURIFIED STRAINS OF MAREK'S DISEASE VIRUS AND THE HERPESVIRUS OF TURKEYS ONCOGENESIS AND HERPES-TYPE VIRUSES (ABSTRACT OF PAPERS), CAMBRIDGE, ENGLAND, JUNE 20-25, PAGES 13-13 HV MD, VIRUS PURIFICATION, MARKER, HVT LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3062

6024. PURCHASE, H.G. 1971 ESPERIENZE DI VACCINAZIONE CONTRO LA MALATTIA DI MAREK (MD) COL VIRUS ERPETICO DEL TACCHINO PROCEEDINGS OF THE 10TH CONVENTION OF POULTRY PATHOLOGY, MAY 29-JUNE 2, PAGES 13-23 HV MD, CONTROL - VACCINATION, TRANSMISSION EXPERIMENT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2668

6025. PURCHASE, H.G. 1971 MAREK'S DISEASE VIRUS HOST CELL RELATIONSHIPS IN VITRO AND IN VIVO AND BIOLOGICAL MARKERS FOR CLONED PREPARATIONS OF THE VIRUS AND HERPESVIRUS OF TURKEYS DABBB 32(2), 1101 HV MD, HVT, TRANSMISSION EXPERIMENT, CELL CULTURE, CLONE LIB UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 (NO REPRINTS AVAILABLE) 2058

6026. PURCHASE, H.G. 1972 BIOLOGICAL MARKERS FOR PURIFIED STRAINS OF MAREK'S DISEASE VIRUS AND THE HERPESVIRUS OF TURKEYS ONCOGENESIS AND HERPESVIRUSES. INTERNATIONAL AGENCY FOR RESEARCH ON CANCER, LYON, FRANCE, SCIENTIFIC PUBLICATIONS (2), 95-98 HV MD, HVT, MARKER, REVIEW LIB-RP-BK-OK (QR361 .I5) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2521

6027. PURCHASE, H.G. 1972 RECENT ADVANCES IN THE KNOWLEDGE OF MAREK'S DISEASE ADVSA 16, 223-257 HV MD, REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2475

6028. PURCHASE, H.G. 1972 ROLE OF HERPESVIRUSES IN MAREK'S DISEASE, A MALIGNANT LYMPHOMA OF CHICKENS FEPRA 31(6), 1634-1638: MAREK'S DISEASE, II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION, NEW YORK, PAGES 21-31, 1973 HV MD, NEOPLASM, HERPESVIRUS LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2670

6029. PURCHASE, H.G. 1973 THE AVIAN LEUKOSIS COMPLEX MERCK VETERINARY MANUAL, 4TH EDITION, PART 3. MERCK AND COMPANY, RAHWAY, NEW JERSEY, PAGES 1013-1021 L/S, HV L/S, MD, REVIEW LIB-RP-BK-OK (SF761 .M4) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3721

6030. PURCHASE, H.G. 1973 CONTROL OF MAREK'S DISEASE BY VACCINATION WPSJA 29(3), 238-250 HV MD, CONTROL - VACCINATION, REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL

Appendix 2

Appendix 2

POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3161

6031. PURCHASE. H.G. 1973 THE DIFFERENTIAL DIAGNOSIS OF LYMPHOID LEUKOSIS AND MAREK'S DISEASE VETERINARY LABORATORY DIAGNOSTICIANS AND POULTRY DISEASE CONFERENCE. MICHIGAN STATE UNIVERSITY. EAST LANSING. MICHIGAN. JUNE 12-14. NO PAGE NUMBERS L/S. HV LL. MD. DIFFERENTIAL DIAGNOSIS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3725

6032. PURCHASE. H.G. 1973 FLUORESCENT-ANTIBODY TECHNIQUES IN AVIAN RESEARCH AVDIA 17(1). 213-226 L/S FLUORESCENT ANTIBODY. TECHNIQUE. SEROLOGICAL TESTING LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2773

6033. PURCHASE. H.G. 1973 ONCORNAVIRUSES (LEUKOVIRUSES). MAREK'S DISEASE VIRUS OUTLINE OF VETERINARY VIROLOGY - NOTEBOOK FOR INSTRUCTIONAL PURPOSES. LUCAS BROTHERS. COLUMBIA. MISSOURI. CHAPTERS 11 AND 12. PAGES 70-82 L/S. HV L/S. MD. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3718

6034. PURCHASE. H.G. 1973 RECENT ADVANCES IN THE CONTROL OF LYMPHOID LEUKOSIS AND MAREK'S DISEASE AVICULTURA BRASILEIRA (MAGAZINE) 10TH YEAR (116). 46-48 L/S. HV LL. RSV. MD. CONTROL - VACCINATION. SUBGROUP. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3121

6035. PURCHASE. H.G. 1973 RETICULOENDOTHELIOSIS IN DUCKS AND TURKEYS THE 45TH NORTHEASTERN CONFERENCE ON AVIAN DISEASES. WEST VIRGINIA UNIVERSITY. MORGANTOWN. WEST VIRGINIA. JUNE 17-19. NO PAGE NUMBERS GIVEN RE REV. DUCK. TURKEY. CSV. DIAV LIB-RP-ABSTR-OK (SF995 .N6) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2935

6036. PURCHASE. H.G. 1974 PROGRESS IN THE CONTROL OF MAREK'S DISEASE HV MD. CONTROL - VACCINATION. CONTROL - DISEASE LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823. PRESENT: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. NATIONAL PROGRAM STAFF. LIVESTOCK AND VETERINARY SCIENCE. NORTH BUILDING AGRICULTURAL RESEARCH CENTER WEST. BELTSVILLE. MD 20705 3548

6037. PURCHASE. H.G. AVIAN LEUKOSIS AND SARCOMAS L/S LL. NEOPLASM. REVIEW LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3056

6038. PURCHASE. H.G. IMMUNOFLUORESCENCE FOR AVIAN ONCOGENIC VIRUSES L/S. HV. RE L/S. MD. REV. FLUORESCENT ANTIBODY. CELL CULTURE. TECHNIQUE LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3422

6039. PURCHASE. H.G. LATEST ON THE PATHOGENESIS AND PREVENTION OF LYMPHOID LEUKOSIS L/S LL. PATHOGENESIS. CONTROL - ERADICATION LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3458

6040. PURCHASE. H.G. RETICULOENDOTHELIOSIS RE REV. REVIEW LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3523

6082. PURCHASE. H.G.. BIGGS. P.M. 1967 CHARACTERIZATION OF FIVE ISOLATES OF MAREK'S DISEASE RVTSA 8(4). 440-449 HV MD. TRANSMISSION EXPERIMENT. PATHOLOGY. HISTOPATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0181

M

6083. PURCHASE. H.G.. BURGOYNE. G.H. 1970 IMMUNOFLUORESCENCE IN THE STUDY OF MAREK'S DISEASE: DETECTION OF ANTIBODY AJVRA 31(1). 117-123: MAREK'S DISEASE. II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 304-318. 1973 HV MD. FLUORESCENT ANTIBODY LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0568 MM

6084. PURCHASE. H.G.. BURMESTER. B.R. 1972 LEUKOSIS/SARCOMA GROUP DISEASES OF POULTRY. 6TH EDITION. EDITED BY HOFSTAD. M.S.. CALNEK. B.W.. HELMBOLDT. C.F.. REID. W.M.. YODER. H.W.. JR.: IOWA STATE UNIVERSITY PRESS. AMES. IOWA. CHAPTER 15. PAGES 502-568 L/S L/S. REVIEW LIB-RP-BK-OK (SF995 .B5) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2069

6085. PURCHASE. H.G.. BURMESTER. B.R. 1973 THE RETICULOENDOTHELIOSIS (RE) GROUP OF RNA TUMOR VIRUSES PROCEEDINGS OF THE 5TH WORLD VETERINARY POULTRY ASSOCIATION CONGRESS. MUNICH. GERMANY. SEPTEMBER 3-5 RE REV. RNA LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2850

6086. PURCHASE. H.G.. BURMESTER. B.R. 1973 THE RETICULOENDOTHELIOSIS (RE) GROUP OF RNA TUMOR VIRUSES PROCEEDINGS OF THE 5TH WORLD VETERINARY POULTRY ASSOCIATION CONGRESS. MUNICH. GERMANY. SEPTEMBER 3-5 RE REV. RNA LIB-RP-ABSTR UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3701

6087. PURCHASE. H.G.. BURMESTER. B.R.. CUNNINGHAM. C.H. 1971 PATHOGENICITY AND ANTIGENICITY OF CLONES FROM STRAINS OF MAREK'S DISEASE VIRUS AND THE HERPESVIRUS OF TURKEYS INFIB 3(2). 295-303: MAREK'S DISEASE. II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 107-124. 1974 HV MD. HVT. PATHOGENICITY. ANTIGEN. CLONE LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1684 M

6088. PURCHASE. H.G.. BURMESTER. B.R.. CUNNINGHAM. H.G. 1971 RESPONSES OF CELL CULTURES FROM VARIOUS AVIAN SPECIES TO MAREK'S DISEASE VIRUS AND THE HERPESVIRUS OF TURKEYS AJVRA 32(11). 1811-1823: MAREK'S DISEASE. I: GENETICS AND VIROLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 117-142. 1974 HV HVT. MD. CELL CULTURE LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1999 M

6089. PURCHASE. H.G.. BURMESTER. B.R.. KUJDYCH. I. 1966 THE INFLUENCE OF THE ENVIRONMENT ON AVIAN LEUKOSIS VETRA 79(6). 160-162 L/S. HV ENVIRONMENT. MD LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1873

6090. PURCHASE. H.G.. BURMESTER. B.R.. LUDFORD. C.G. 1973 PATHOGENICITY OF VIRUSES OF THE RETICULOENDOTHELIOSIS GROUP FOR CHICKENS AND DUCKS PROCEEDINGS OF THE 110TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. PHILADELPHIA. PENNSYLVANIA. JULY 16-19. PAGES 162-162 RE REV. DUCK. PATHOGENICITY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3703

6091. PURCHASE. H.G.. BURMESTER. B.R.. OKAZAKI. W. 1970 THE POTENTIAL FOR A SATISFACTORY MD VACCINE PROCEEDINGS OF THE 5TH NATIONAL MEETING ON POULTRY CONDEMNATIONS. CONVENTION HALL. OCEAN CITY. MARYLAND. OCTOBER 20-21. PAGE 77 HV MD. CONTROL - VACCINATION. HVT. REVIEW LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1065

6092. PURCHASE. H.G.. BURMESTER. B.R.. OKAZAKI. W. 1970 STATUS OF THE CONTROL OF MAREK'S DISEASE BY VACCINATION PROCEEDINGS OF THE 74TH ANNUAL MEETING OF THE UNITED STATES ANIMAL HEALTH ASOCIATION. 315-322 MD CONTROL - VACCINATION. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY

Appendix 2

RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2170

6093. PURCHASE. H.G.. CHUBB. R.C.. BIGGS. P.M. 1967 IMMUNOLOGICAL DISTURBANCES IN BIRDS INFECTED WITH LYMPHOID LEUKOSIS AND MAREK'S DISEASE PROCEEDINGS OF THE 104TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICINE ASSOCIATION. DALLAS. TEXAS. PAGES 139-139 L/S. HV LL. MD. IMMUNOLOGY LIB-RP-ABSTR-OK WORK DONE: HOUGHTON POULTRY RESEARCH STATION. HOUGHTON. HUNTINGDON. ENGLAND. PRESENT: H.G. PURCHASE. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3046

6094. PURCHASE. H.G.. CHUBB. R.C.. BIGGS. P.M. 1968 EFFECT OF LYMPHOID LEUKOSIS AND MAREK'S DISEASE ON THE IMMUNOLOGICAL RESPONSIVENESS OF THE CHICKEN JNCIA 40(3). 583-592 HV. L/S LL. MD. IMMUNITY. RAV. GRAFT VIRUS HOST REACTION. TRANSPLANTATION. ANTIBODY. PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0450 LM

6095. PURCHASE. H.G.. CUNNINGHAM. C.H.. BURMESTER. B.R. 1966 GENETIC DIFFERENCES AMONG CHICKEN EMBRYOS IN RESPONSE TO INOCULATION WITH AN ISOLATE OF INFECTIOUS BRONCHITIS VIRUS AVDIA 10(2). 162-172 OTHER GENETICS. CHICK EMBRYO. INFECTIOUS BRONCHITIS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1875

6096. PURCHASE. H.G.. CUNNINGHAM. C.H.. BURMESTER. B.R. 1966 IDENTIFICATION AND EPIZOOTIOLOGY OF INFECTIOUS BRONCHITIS IN A CLOSED FLOCK AVDIA 10(1). 111-121 L/S INFECTIOUS BRONCHITIS. EPIZOOTIOLOGY. CLASSIFICATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2992

6097. PURCHASE. H.G.. LUDFORD. C.G.. NAZERIAN. K.. COX. H.W. 1973. A NEW GROUP OF ONCOGENIC VIRUSES: RETICULOENDOTHELIOSIS. CHICK SYNCYTIAL. DUCK INFECTIOUS ANEMIA. AND SPLEEN NECROSIS VIRUSES JNCIA 51(2). 489-499 L/S. RE REV. CSV. DIAV. SPLEEN NECROSIS VIRUS. L/S LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3196 R

6098. PURCHASE. H.G.. MARE. C.J.. BURMESTER. B.R. 1972 ANTIGENIC COMPARISON OF AVIAN AND MAMMALIAN HERPESVIRUSES AND PROTECTION TESTS AGAINST MAREK'S DISEASE PROCEEDINGS OF THE 76TH ANIMAL HEALTH ASSOCIATION AND THE 15TH ANNUAL CONFERENCE OF THE AMERICAN ASSOCIATION OF VETERINARY LABORATORY DIAGNOSTICIANS. MIAMI BEACH. FLORIDA. NOVEMBER 5-10. PAGES 484-492 HV MD. CONTROL - VACCINATION. FLUORESCENT ANTIBODY LIB-RP-BK-OK (SF1 .U55) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3204 M

6099. PURCHASE. H.G.. OKAZAKI. W. 1964 MORPHOLOGY OF FOCI PRODUCED BY STANDARD PREPARATIONS OF ROUS SARCOMA VIRUS JNCIA 32(3). 579-589 L/S MORPHOLOGY. LYMPHOID FOCI. RSV. CELL CULTURE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0601

6100. PURCHASE. H.G.. OKAZAKI. W. 1966 IN VIVO REPLACEMENT OF THE HELPER VIRUS IN BRYAN'S STRAIN OF ROUS SARCOMA VIRUS BY AMV AND RPL12 VIRUSES JNCIA 37(5). 563-571 L/S RSV. AMV. HELPER VIRUS. LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1414 L

6101. PURCHASE. H.G.. OKAZAKI. W. 1971 EFFECT OF VACCINATION WITH HERPESVIRUS OF TURKEYS (HVT) ON HORIZONTAL SPREAD OF MAREK'S DISEASE HERPESVIRUS AVDIA 15(2). 391-397 HV IMMUNIZATION. HVT. MD. TRANSMISSION - CONTACT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1717 MM

6102. PURCHASE. H.G.. OKAZAKI. W.. BURMESTER. B.R. 1970 THE CONTROL OF MAREK'S DISEASE BY VACCINATION WITH A HERPESVIRUS OF TURKEYS PROCEEDINGS OF THE 107TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICINE ASSOCIATION. LAS VEGAS. NEVADA. JUNE 23-25. PAGES 193-193 HV MD. CONTROL - VACCINATION. HVT LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF

Appendix 2

AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3060

6103. PURCHASE. H.G.. OKAZAKI. W.. BURMESTER. B.R. 1971 FIELD TRIALS WITH THE HERPES VIRUS OF TURKEYS (HVT) STRAIN FC126 AS A VACCINE AGAINST MAREK'S DISEASE POSCA 50(3). 775-783; MAREK'S DISEASE. II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 269-286. 1974 HV MD. HVT. CONTROL - VACCINATION. FIELD TRIAL LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1759

6104. PURCHASE. H.G.. OKAZAKI. W.. BURMESTER. B.R. 1972 LONG-TERM FIELD TRIALS WITH THE HERPESVIRUS OF TURKEYS VACCINE AGAINST MAREK'S DISEASE AVDIA 16(1). 57-71 HV HVT. FIELD TRIAL. CONTROL - VACCINATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 44823 2349 MM

6105. PURCHASE. H.G.. OKAZAKI. W.. BURMESTER. B.R. 1972 THE MINIMUM PROTECTIVE DOSE OF THE HERPESVIRUS TURKEYS VACCINE AGAINST MAREK'S DISEASE VETRA 91(4). 79-84 HV HVT. CONTROL - VACCINATION. DOSE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2484 MM

6106. PURCHASE. H.G.. SHARMA. J.M. 1973 ABSENCE OF VACCINE PROTECTION AGAINST MAREK'S DISEASE IN IMMUNOLOGICALLY DEFICIENT CHICKENS PROCEEDINGS OF THE 54TH CONFERENCE OF RESEARCH WORKERS IN ANIMAL DISEASES. CHICAGO. ILLINOIS. NOVEMBER 26-27. PAGES 13-13 HV MD. RESISTANCE - VIRAL. CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING; MI 48823 3728

6107. PURCHASE. H.G.. SHARMA. J.M. 1973 THE DIFFERENTIAL DIAGNOSIS OF LYMPHOID LEUKOSIS AND MAREK'S DISEASE AMERICAN ASSOCIATION OF AVIAN PATHOLOGIST'S SLIDE SET (WITH ACCOMPANYING MANUSCRIPT) L/S. HV LL. MD. DIFFERENTIAL DIAGNOSIS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3719 LM

6108. PURCHASE. H.G.. SHARMA. J.M. 1974 AMELIORATION OF MAREK'S DISEASE AND ABSENCE OF VACCINE PROTECTION IN IMMUNOLOGICALLY DEFICIENT CHICKENS NATUA 248(5447). 419-420 HV MD. CONTROL - VACCINATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3495 MM

6109. PURCHASE. H.G.. SOLOMON. J.J.. JOHNSON. D.C. 1969 AVIAN LEUKOSIS-SARCOMA VIRUSES AND ANTIBODY IN FIELD FLOCKS. AND THEIR RELATIONSHIP TO "LEUKOSIS" MORTALITY AVDIA 13(1). 58-71 L/S. HV LL. MD. ANTIBODY. TRANSMISSION EXPERIMENT. FIELD TRIAL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0204

6110. PURCHASE. H.G.. STONE. H.A. 1974 RESISTANCE TO LYMPHOID LEUKOSIS TUMORS IN LINE 6. INDICATED BY TUMOR REGRESSION PROCEEDINGS OF THE 111TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. DENVER. COLORADO. JULY 22-25. PAGES 136-136 L/S RAV. LL. CONTROL - VACCINATION. RESISTANCE - GENETIC. REGRESSION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3706

6111. PURCHASE. H.G.. WITTER. R.L. 1971 MAREK'S DISEASE METHODS FOR EXAMINING POULTRY BIOLOGICS AND FOR IDENTIFYING AND QUANTIFYING AVIAN PATHOGENS. NATIONAL ACADEMY OF SCIENCES. WASHINGTON. DISTRICT OF COLUMBIA. CHAPTER 10. PAGES 147-155 HV MD. REVIEW. PATHOLOGY LIB-RP-BK-OK (QH307 .N5) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3059

6112. PURCHASE. H.G.. WITTER. R.L.. OKAZAKI. W.. BURMESTER. B.R. 1971 VACCINATION AGAINST MAREK'S DISEASE PERSPECTIVES

IN VIROLOGY. ACADEMIC PRESS. NEW YORK AND LONDON. 7(CHAPTER 7). 91-110 HV MD. REVIEW. HVT. CONTROL - VACCINATION LIB-RP-BK-OK (QR360 .P4) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1012

6233. REAMER. R.H.. OKAZAKI. W. 1970 EVIDENCE FOR THE DEFECTIVENESS OF THE HARRIS STRAIN OF ROUS SARCOMA VIRUS JNCIA 44(4). 763-767 L/S RSV. DEFECTIVENESS. HELPER VIRUS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0841 L

6234. REAMER. R.H.. OKAZAKI. W.. RISPENS. B.H. 1967 ISOLATION OF AN AVIAN LEUKOSIS VIRUS ASSOCIATED WITH THE HARRIS STRAIN OF ROUS SARCOMA VIRUS VIRLA 33(2). 363-365 L/S RSV. RAV. CELL CULTURE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1255 L

6344. RISPENS. B.H.. LONG. P.A.. OKAZAKI. W.. BURMESTER. B.R. 1970 THE NP ACTIVATION TEST FOR ASSAY OF AVIAN LEUKOSIS/SARCOMA VIRUSES AVDIA 14(4). 738-751 L/S L/S. VIRUS TITRATION. NP CELL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1120 LL

6362. ROBERTS. E.. CARD. L.E.. SHAKLEE. W.E.. WATERS. N.F. 1952 INHERITANCE OF EGG WEIGHT POSCA 31(5). 870-875 OTHER GENETICS. WEIGHT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3018

6589. SANGER. V.L.. BURMESTER. B.R.. MORRILL. C.C. 1966 SERUM ALKALINE PHOSPHATASE LEVELS IN AVIAN OSTEOPETROSIS AVDIA 10(3). 364-371 L/S ENZYME. SERUM. OSTEOPETROSIS LIB-RP-OK WORK DONE: OHIO AGRICULTURAL EXPERIMENT STATION. DEPARTMENT OF VETERINARY SCIENCE. WOOSTER. OH 44691: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823: MICHIGAN STATE UNIVERSITY. DEPARTMENT OF PATHOLOGY. EAST LANSING. MI 48823. PRESENT: B.R. BURMESTER. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3040

6665. SCHAIBLE. P.J.. BURMESTER. B.R.. SYKES. J.F.. THORP. F.. JR. 1944 A STUDY OF LEG ANOMALY CAUSED BY CONFINING CHICKENS IN SMALL CAGES AJPHA 141(2). 274-280 OTHER NUTRITION. WEIGHT. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2977

6838. SHARMA. J.M. 1971 IN VITRO CELL ASSOCIATION OF MAREK'S DISEASE HERPESVIRUS AJVRA 32(2). 291-301; MAREK'S DISEASE. II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 84-106. 1974 HV MD. CELL CULTURE LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1501 M

6839. SHARMA. J.M. 1973 LACK OF A THRESHOLD OF GENETIC RESISTANCE TO MAREK'S DISEASE AND THE INCIDENCE OF HUMORAL ANTIBODY AVIAN PATHOLOGY 2(2). 75-90 HV MD. RESISTANCE - GENETIC. ANTIBODY. PATHOLOGY. VIRUS NEUTRALIZATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3177 M

6840. SHARMA. J.M. 1973 MECHANISM OF RESISTANCE TO MAREK'S DISEASE: RESISTANCE IN IMMUNOLOGICALLY DEFICIENT CHICKENS PROCEEDINGS OF THE 54TH CONFERENCE OF RESEARCH WORKERS IN ANIMAL DISEASES. CHICAGO. ILLINOIS. NOVEMBER 26-27. PAGES 2-2 HV MD. RESISTANCE - VIRAL LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3726

6841. SHARMA. J.M. 1973 RESISTANCE TO MAREK'S DISEASE PROCEEDINGS OF THE 22ND WESTERN POULTRY DISEASE CONFERENCE. AND THE 7TH CALIFORNIA POULTRY HEALTH SYMPOSIUM. UNIVERSITY OF CALIFORNIA. DAVIS. CALIFORNIA. MARCH 27-29. PAGES 47-47 HV

Appendix 2

MD. RESISTANCE - GENETIC, MATERNAL ANTIBODY, CONTROL - VACCINATION LIB-RP-ABSTR-BK-OK (SF995 .W48) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0018

6842. SHARMA. J.M. 1974 RESISTANCE TO MAREK'S DISEASE IN IMMUNOLOGICALLY DEFICIENT CHICKENS NATUA 247(5436). 117-118 HV MD. RESISTANCE - GENETIC. BURSECTOMY. IMMUNOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3165 MM

6843. SHARMA. J.M. MAREK'S DISEASE HV MD. REVIEW LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3407

6858. SHARMA. J.M.. BURGER. D.. KENZY. S.G. 1972 SEROLOGICAL RELATIONSHIPS AMONG HERPESVIRUSES: CROSS-REACTION BETWEEN MAREK'S DISEASE VIRUS AND PSEUDORABIES VIRUS AS DETECTED BY IMMUNOFLUORESCENCE INFIB 5(3). 406 HV MD. PSEUDORABIES VIRUS. FLUORESCENT ANTIBODY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2204 M

6861. SHARMA. J.M.. PURCHASE. H.G. 1974 REPLICATION OF MAREK'S DISEASE VIRUS IN CELL CULTURES DERIVED FROM GENETICALLY RESISTANT CHICKENS INFIB 9(6). 1092-1097 HV MD. VIRUS SYNTHESIS. CELL CULTURE. RESISTANCE - GENETIC LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2922 MM

6862. SHARMA. J.M.. STONE. H.A. 1972 GENETIC RESISTANCE TO MAREK'S DISEASE. DELINEATION OF THE RESPONSE OF GENETICALLY RESISTANT CHICKENS TO MAREK'S DISEASE VIRUS INFECTION AVDIA. 16(4). 894-906: MAREK'S DISEASE. I: GENETICS AND VIROLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 24-36. 1974 HV MD. RESISTANCE - GENETIC. PATHOLOGY LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2569 MM

6863. SHARMA. J.M.. WITTER. R.L. 1974 THE EFFECT OF B-CELL IMMUNOSUPPRESSION ON AGE RELATED RESISTANCE OF CHICKENS TO MAREK'S DISEASE HV MD. AGE. RESISTANCE. IMMUNOSUPPRESSION LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3547

6864. SHARMA. J.M.. WITTER. R.L. 1974 ROLE OF HUMORAL IMMUNITY IN RESISTANCE TO MAREK'S DISEASE PROCEEDINGS OF THE 111TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. DENVER. COLORADO. JULY 22-25. PAGES 137-137 HV MD. IMMUNITY - HUMORAL. REGRESSION. RESISTANCE - AGE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3708

6865. SHARMA. J.M.. WITTER. R.L.. BURMESTER. B.R. 1973 AGE-RELATED RESISTANCE TO MAREK'S DISEASE: PATHOGENESIS IN OLDER CHICKENS VETERINARY LABORATORY DIAGNOSTICIANS AND POULTRY DISEASE CONFERENCE. MICHIGAN STATE UNIVERSITY. EAST LANSING. MICHIGAN. JUNE 12-14. NO PAGE NUMBERS HV MD. RESISTANCE - AGE. PATHOGENESIS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3724

6866. SHARMA. J.M.. WITTER. R.L.. BURMESTER. B.R. 1973 PATHOGENESIS OF MAREK'S DISEASE IN OLD CHICKENS: LESION REGRESSION AS THE BASIS FOR AGE-RELATED RESISTANCE INFIB 8(5). 715-724 HV MD. PATHOGENESIS. AGE. REGRESSION. CONTROL - VACCINATION. RESISTANCE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2833 MM

6867. SHARMA. J.M.. WITTER. R.L.. BURMESTER. B.R.. LANDON. J.C. 1973 PUBLIC HEALTH IMPLICATIONS OF MAREK'S DISEASE VIRUS AND HERPESVIRUS OF TURKEYS. STUDIES ON HUMAN AND SUBHUMAN PRIMATES JNCIA 51(4). 1123-1128 HV MD. HVT. CONTROL - M

Appendix 2

VACCINATION. PRIMATE. HUMAN. RIF TEST LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2862

6868. SHARMA. J.M.. WITTER. R.L.. BURMESTER. B.R.. LANDON. J.C. 1973 PUBLIC HEALTH IMPLICATIONS OF MAREK'S DISEASE VIRUS AND HERPESVIRUS OF TURKEYS: STUDIES ON HUMAN AND SUBHUMAN PRIMATES PROCEEDINGS OF THE 110TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. PHILADELPHIA. PENNSYLVANIA. JULY 16-19. PAGES 164-164 HV MD. HVT. HUMAN. PRIMATE. MAMMAL. PATHOLOGY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3705

6869. SHARMA. J.M.. WITTER. R.L.. PURCHASE. H.G. 1974 CELL-MEDIATED IMMUNE SURVEILLANCE IN MAREK'S DISEASE: ABSENCE OF AGE-RESISTANCE IN NEONATALLY THYMECTOMIZED CHICKENS HV MD. IMMUNITY - CELLULAR. RESISTANCE - AGE. THYMECTOMY LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3671 M

6870. SHARMA. J.M.. WITTER. R.L.. SHRAMEK. G.. WOLFE. L.G.. BURMESTER. B.R.. DEINHARDT. F. 1972 LACK OF PATHOGENICITY OF MAREK'S DISEASE VIRUS AND HERPESVIRUS OF TURKEYS IN MARMOSET MONKEYS JNCIA 49(4). 1191-1197: MAREK'S DISEASE. II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 44-56. 1974 HV MD. PATHOGENICITY. HVT. PRIMATE. CONTROL - VACCINATION LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3057 MAI

6960. SICCARDI. F.J. 1968 THE DIFFERENTIAL DIAGNOSIS OF MAREK'S DISEASE (MD) AND LYMPHOID LEUKOSIS (LL) JAVMA 152. 1351-1352 HV. L/S MD. LL. DIFFERENTIAL DIAGNOSIS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3054 LM

6962. SICCARDI. F.J.. BURMESTER. B.R. 1970 THE DIFFERENTIAL DIAGNOSIS OF LYMPHOID LEUKOSIS AND MAREK'S DISEASE UNITED STATES DEPARTMENT OF AGRICULTURE TECHNICAL BULLETIN (1412). 1-25 L/S. HV LL. MD. DIFFERENTIAL DIAGNOSIS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0850

6964. SICCARDI. F.J.. POMEROY. B.S. 1967 SEROTYPING AND PATHOGENICITY OF E. COLI ISOLATES FROM SYSTEMIC INFECTIONS OF CHICKENS AND TURKEYS PROCEEDINGS OF THE 104TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICINE ASSOCIATION. DALLAS. TEXAS. PAGES 139-139 L/S PATHOGENICITY. FIELD TRIAL LIB-RP-ABSTR-OK WORK DONE: UNIVERSITY OF MINNESOTA. COLLEGE OF VETERINARY MEDICINE. DEPARTMENT OF BACTERIOLOGY AND PUBLIC HEALTH. SAINT PAUL. MN 55101. PRESENT: UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3047

7045. SINGH. B.. GREWAL. G.S.. CHAWLA. R.S. 1972 SOME UNCOMMON AVIAN NEOPLASMS PJMJA 9(1)(SUPPLEMENT). 177-181 OTHER NEOPLASM. REVIEW LIB FANAR REGIONAL POULTRY LABORATORY. DEPARTMENT OF VIROLOGY. POST OFFICE BOX 3216. BEIRUT. LEBANON 2730 E

7047. SINGH. K.V.. SAAD. N.. ZEIN. A.E. 1972 ISOLATION OF MAREK'S DISEASE VIRUS IN LEBANON BEDAA 20(1). 1-7 HV VIRUS ISOLATION. MD LIB-RP FANAR REGIONAL POULTRY LABORATORY. DEPARTMENT OF VIROLOGY. POST OFFICE BOX 3216. BEIRUT. LEBANON 2443 E

7048. SINGH. K.V.. SAAS. N.. ZEIN. A.E. 1971 SERUM NEUTRALIZING ANTIBODIES FOR ROUS SARCOMA VIRUS AMONG CHICKENS IN LEBANON POSCA 50(5). 1526 L/S RSV. VIRUS NEUTRALIZATION LIB-RP FANAR REGIONAL POULTRY LABORATORY. DEPARTMENT OF VIROLOGY. POST OFFICE BOX 3216. BEIRUT. LEBANON 2281 E

7199. SOLOMON. J.J.. BURMESTER. B.R.. FREDRICKSON. T.N. 1966 INVESTIGATIONS OF LYMPHOID LEUKOSIS INFECTION IN GENETICALLY SIMILAR CHICKEN POPULATIONS AVDIA 10(4). 477-484 L/S LL. GENETICS. EPIZOOTIOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE

Appendix 2

Appendix 2

ROAD. EAST LANSING. MI 48823 1452

7200. SOLOMON. J.J.. GLATT. K.A.. OKAZAKI. W. 1966 INHIBITORY EFFECT OF HEPARIN ON ROUS SARCOMA VIRUS JOBAA 92(6). 1855-1856 L/S RSV. HEPARIN LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1453 L

7201. SOLOMON. J.J.. LONG. P.A.. OKAZAKI. W. 1971 PROCEDURES FOR THE IN VITRO ASSAY OF VIRUSES AND ANTIBODY OF AVIAN LYMPHOID LEUKOSIS AND MAREK'S DISEASE AGRICULTURE HANDBOOK. UNITED STATES GOVERNMENT PRINTING OFFICE. UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE (404). 1-18 L/S. HV L/S. MD. VIRUS TITRATION. ANTIBODY. TECHNIQUE. LL LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1817

7202. SOLOMON. J.J.. MILLER. LOUISE T.. PURCHASE. H.G.. PIRAINO. F.F. 1966 THE INTRODUCTION OF ANTI-ROUS SARCOMA VIRUS ACTIVITY AND CHICK EMBRYO CELL TOXICITY INTO HUMAN SERA DURING PROCESSING JLCMA 68(4). 694-700 L/S HUMAN. SERUM. TOXICITY. CELL CULTURE LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1879

7203. SOLOMON. J.J.. PURCHASE. H.G.. BURMESTER. B.R. 1969 A SEARCH FOR AVIAN LEUKOSIS VIRUS AND ANTI-VIRAL ACTIVITY IN THE BLOOD OF LEUKEMIC AND NONLEUKEMIC ADULTS AND CHILDREN JNCIA 42(1). 29-33 L/S ANTIBODY. LEUKEMIA. HUMAN. RSV LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0183 L

7204. SOLOMON. J.J.. REAMER. R.H.. OKAZAKI. W. 1966 RESEARCH NOTE: ARTIFACTS INDUCED BY POTASSIUM CITRATE IN CHICK EMBRYO CELLS RESEMBLING ROUS SARCOMA VIRUS FOCI AVDIA 10(1). 94-97 L/S RSV. LYMPHOID FOCI. CELL CULTURE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1876

7205. SOLOMON. J.J.. WITTER. R.L. 1973 ABSENCE OF MAREK'S DISEASE IN CHICKS HATCHED FROM EGGS CONTAINING BLOOD OR MEAT SPOTS AVDIA 17(1). 141-144 HV MD. CONTROL - VACCINATION. EMBRYO INOCULATION. TRANSMISSION - CONGENITAL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2749 M

7206. SOLOMON. J.J.. WITTER. R.L.. NAZERIAN. K.. BURMESTER. B.R. 1968 STUDIES ON THE ETIOLOGY OF MAREK'S DISEASE. I. PROPAGATION OF THE AGENT IN CELL CULTURE PSEBA 127. 173-177 HV MD. CELL CULTURE. DUCK. CYTOPATHOLOGY LIB-RP UNITED STATED DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0449 MM

7207. SOLOMON. J.J.. WITTER. R.L.. STONE. H.A.. CHAMPION. L.R. 1970 EVIDENCE AGAINST EMBRYO TRANSMISSION OF MAREK'S DISEASE VIRUS AVDIA 14(4). 752-762; MAREK'S DISEASE. II: PATHOGENICITY & IMMUNOLOGY (A VOLUME IN MSS' SERIES ON HERPESVIRUS-RELATED DISEASES). MSS INFORMATION CORPORATION. NEW YORK. PAGES 137-147. 1973 HV MD. TRANSMISSION - CONGENITAL LIB-RP-BK-OK (SF995 .A2 .M73 .M37) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1121 MM

7332. STETTENHEIM. P. 1959 THE DEVELOPMENT OF PLUMAGE IN YOUNG LEGHORN CHICKENS PROCEEDINGS OF THE ANNUAL MEETING OF THE AMERICAN ORNATHOLOGY SOCIETY. REGINA. SASKATCHEWAN. SASKATOON. CANADA OTHER GROWTH RATE. FEATHER FOLLICLE LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3534

7334. STETTENHEIM. P.. LUCAS. A.M.. DENINGTON. EFFIE M.. JAMROZ. C. 1963 THE ARRANGEMENT AND ACTION OF THE FEATHER MUSCLES IN CHICKENS PIORA (13TH). 918-924 OTHER FEATHER FOLLICLE LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3037

Appendix 2

7351. STONE, H.A. 1967 GENETIC CONTROL OF AVIAN LEUKOSIS-SARCOMA VIRUSES POSCA 46(5), 1323-1324 L/S L/S, RESISTANCE - GENETIC, GENETICS, SUBGROUP LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3048

7352. STONE, H.A. 1969 INVESTIGATIONS OF THE GENETIC CONTROL OF MAREK'S DISEASE POSCA 48(5), 1879-1879 HV MD, CONTROL, GENETICS, TRANSMISSION EXPERIMENT, YOLK SAC CULTURE, CAM LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0513

7359. STONE, H.A., BRILES, W.E. GENETIC RESISTANCE TO MAREK'S DISEASE IN EXPERIMENTAL CROSSES HV MD, RESISTANCE - GENETIC LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3433 MM

7360. STONE, H.A., HOLLY, ELIZABETH A. 1971 RELIABILITY OF THE AGAR-GEL PRECIPITIN TEST IN MAREK'S DISEASE STUDIES AVDIA 15(4), 939-945 MD IMMUNODIFFUSION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2095 M

7361. STONE, H.A., HOLLY, ELIZABETH A., BURMESTER, B.R., COLEMAN, T.H. 1970 GENETIC CONTROL OF MAREK'S DISEASE POSCA 49(5), 1441-1442 HV GENETICS, MD LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1568 M

7362. STONE, H.A., SHARMA, J.M. 1972 GENETIC RESISTANCE TO MAREK'S DISEASE POSCA 51(5), 1875-1875 HV MD, RESISTANCE - GENETIC LIB UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2582 M

8117. WALTER, W.G., BURMESTER, B.R., FONTES, A.K. 1963 VARIATION IN THE OCCURRENCE OF ERYTHROBLASTOSIS AND OSTEOPETROSIS INDUCED BY VIRUS FROM INDIVIDUAL CHICKENS INFECTED WITH AVIAN LEUKOSIS STRAIN RPL12 AVDIA 7(1), 79-89 L/S ERYTHROBLASTOSIS, OSTEOPETROSIS, RPL12 LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0331

8148. WATERS, N.F. 1941 GENETIC ASPECTS OF EGG WEIGHT OBSERVED DURING INBREEDING EXPERIMENTS POSCA 20(1), 14-27 OTHER GENETICS, WEIGHT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2973

8149. WATERS, N.F. 1944 THE BREEDER'S PART IN A CLOSED FLOCK SYSTEM OF BREEDING U.S. EGG AND POULTRY MAGAZINE 50, 500-503 OTHER GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1521

8150. WATERS, N.F. 1944 CLOSE THE FLOCK TO POULTRY DISEASES U.S. EGG AND POULTRY MAGAZINE 50, 415-416, 424, 426-428, OTHER GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1524

8151. WATERS, N.F. 1944 THE FLOCK OWNER'S PART IN A CLOSED FLOCK SYSTEM OF BREEDING U.S. EGG AND POULTRY MAGAZINE 50, 549-551 OTHER GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1522

8152. WATERS, N.F. 1944 THE HATCHABILITY OF CHICKEN EGGS AS INFLUENCED BY DIALLEL CROSSING POSCA 23(6), 495-496 OTHER GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2978

8153. WATERS, N.F. 1944 THE HATCHERYMAN'S PART IN A CLOSED FLOCK SYSTEM OF BREEDING U.S. EGG AND POULTRY MAGAZINE 50, 453-455, 472 OTHER GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1525

8154. WATERS, N.F. 1944 IMPROVING POULTRY THROUGH THE CLOSED FLOCK SYSTEM U.S. EGG AND POULTRY MAGAZINE 50, 346-349, 375-376, 378-379 OTHER GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1523

8155. WATERS, N.F. 1945 BREEDINGS FOR RESISTANCE AND SUSCEPTIBILITY TO AVIAN LYMPHOMATOSIS POSCA 24(3), 259-269 L/S LL, GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1638 LL

8156. WATERS, N.F. 1945 HYBRIDS U.S. EGG AND POULTRY MAGAZINE 51, 100-103, 141-142 OTHER GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1526

8157. WATERS, N.F. 1945 THE INFLUENCE OF INBREEDING ON EGG WEIGHT POSCA 24(4), 318-323 OTHER GENETICS, WEIGHT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2981

8158. WATERS, N.F. 1945 THE INFLUENCE OF INBREEDING ON HATCHABILITY POSCA 24(4), 329-334 OTHER GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0145

8159. WATERS, N.F. 1945 THE INFLUENCE OF INBREEDING ON SEXUAL MATURITY POSCA 24(5), 391-395 OTHER INBREEDING, SEX LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1858

8160. WATERS, N.F. 1945 LYMPHOMATOSIS IN CHICKENS AS INFLUENCED BY DIALLEL CROSSING POSCA 24(5), 387-390 L/S LL, GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1637

8161. WATERS, N.F. 1945 NATURAL TRANSMISSION OF AVIAN-LYMPHOMATOSIS POSCA 24(3), 226-233 L/S TRANSMISSION - CONGENITAL, LL, GENETICS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1636 L

8162. WATERS, N.F. 1945 TEN COMMANDMENTS TO REDUCE MORTALITY: POULTRYMEN PAY THE BILL POULTRY TRIBUNE 51, 13, 42-43 OTHER GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1528

8163. WATERS, N.F. 1945 THE WEIGHT OF CHICKEN EGGS AS INFLUENCED BY DIALLEL CROSSING POSCA 24(1), 81-82 OTHER WEIGHT, GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 0172

8164. WATERS, N.F. 1946 THE OCCURRENCE OF LYMPHOID TUMORS IN RESISTANT AND SUSCEPTIBLE CHICKENS JOHEA 37(9), 281-283 L/S, HV LL, GENETICS, MD LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1635

8165. WATERS, N.F. 1947 THE CONTAGIOUS NATURE OF A LYMPHOID TUMOR IN CHICKENS SCIEA 106(2750), 246-247 L/S LL, TRANSMISSION - CONGENITAL, TRANSMISSION - CONTACT LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1634

8166. WATERS, N.F. 1947 FACTORS INVOLVED IN MORTALITY FROM AVIAN LYMPHOMATOSIS POSCA 26(6), 639-647 HV, L/S MD, LL, MORTALITY, PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3006

8167. WATERS, N.F. 1948 THE ROLE OF GENETICS IN DISEASE CONTROL HATCHERY TRIBUNE AND FEED RETAIL 22, 15, 98-100 OTHER

Appendix 2

GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1527

8168. WATERS. N.F. 1949 THE OCCURRENCE OF CROOKED KEELS AMONG INBRED LINES OF WHITE LEGHORNS POSCA 28(5). 725-730 OTHER INBRED LINE. AGE. GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1043

8169. WATERS. N.F. 1949 THE OCCURRENCE OF CROOKED KEELS AMONG INBRED LINES OF WHITE LEGHORNS POSCA 28(5). 784-784 OTHER NUTRITION. GENETICS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3712

8170. WATERS. N.F. 1951 BODY WEIGHT OF DIFFERENT INBRED LINES OF CHICKENS POSCA 30(4). 615-620 OTHER WEIGHT. INBREEDING. CHICKEN LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1835

8171. WATERS. N.F. 1951 MORTALITY FROM LYMPHOMATOSIS AND OTHER CAUSES AMONG INBRED LINES OF WHITELEGHORNS POSCA 30(1). 531-545 L/S. HV LL. GENETICS. MD. PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1633 L

8172. WATERS. N.F. 1952 THE HYBRID CHICKEN EXPERIENCES GROWING PAINS POULTRY COMMENT 9(2). 1-3 OTHER GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1516

8173. WATERS. N.F. 1954 AVIAN LYMPHOMATOSIS MORTALITY AMONG INBRED LINE CROSSES 10TH WORLD'S POULTRY CONGRESS. SECTION PAPERS. 1-5 HV. L/S GENETICS. MD. LL. MORTALITY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1515

8174. WATERS. N.F. 1954 ETIOLOGICAL RELATIONSHIP OF VISCERAL AND NEURAL LYMPHOMATOSIS POSCA 33(2). 365-373 HV. L/S LL. GENETICS. MD LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1632

8175. WATERS. N.F. 1956 GENETICS AND DISEASE YEARBOOK OF AGRICULTURE (2656). 46-54 L/S. HV MD. LL. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0364

8176. WATERS. N.F. 1960 DISEASE RESISTANCE IN ANIMALS BIOLOGICAL AND CHEMICAL CONTROL OF PLANT AND ANIMAL PESTS. AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. WASHINGTON. DISTRICT OF COLUMBIA. PAGES 209-216 OTHER RESISTANCE - GENETIC. RESISTANCE - VIRAL. MAMMAL LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2996

8195. WATERS. N.F.. BRANDLY. C.A. 1940 STUDIES IN VIABILITY OF POULTRY. I. INHERITANCE RESISTANCE TO FOWL PARALYSIS GENTA 25. 139-140 HV MD. RESISTANCE - GENETIC LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1083

8196. WATERS. N.F.. BURMESTER. B.R. 1961 MODE OF INHERITANCE OF RESISTANCE TO ROUS SARCOMA VIRUS IN CHICKENS JNCIA 27(3). 655-661 L/S RSV. GENETICS. RESISTANCE - GENETIC. CONTROL - VACCINATION LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3034 LL

8197. WATERS. N.F.. BURMESTER. B.R. 1963 MODE OF INHERITANCE OF RESISTANCE TO INDUCED ERYTHROBLASTOSIS IN CHICKENS POSCA 42(1). 95-102 L/S RESISTANCE - GENETIC. ERYTHROBLASTOSIS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0323 L

Appendix 2

Appendix 2

8198. WATERS, N.F., BURMESTER, B.R., WALTER, W.G. 1958 GENETICS OF EXPERIMENTALLY INDUCED ERYTHROBLASTOSIS IN CHICKENS JNCIA 20(6), 1245-1256 L/S GENETICS, ERYTHROBLASTOSIS, RESISTANCE - GENETIC LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1529 LL

8199. WATERS, N.F., BURMESTER, B.R., WALTER, W.G. 1960 GENETIC STUDIES OF RESISTANCE TO EXPERIMENTALLY INDUCED ERYTHROBLASTOSIS AND VISCERAL LYMPHOMATOSIS POSCA 39(5), 1304-1304 L/S, HV L/S, LL, MD, ERYTHROBLASTOSIS, RESISTANCE - GENETIC, GENETICS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3080 LL

8200. WATERS, N.F., BYWATERS, J.H. 1941 A LETHAL EMBRYONIC WING MUTATION IN THE DOMESTIC FOWL POSCA 20(5), 477-477 OTHER GENETICS, WING WEB, MORTALITY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3064

8201. WATERS, N.F., BYWATERS, J.H. 1941 THE PROPOSED BREEDING PROGRAM OF THE REGIONAL POULTRY RESEARCH LABORATORY POSCA 20(3), 221-223 L/S GENETICS, REVIEW, LL LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1642

8202. WATERS, N.F., BYWATERS, J.H. 1941 A STUDY OF BODY WEIGHT IN NINE DIFFERENT STRAINS OF WHITE LEGHORNS POSCA 20(5), 476-476 L/S WEIGHT, GENETICS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3710

8203. WATERS, N.F., BYWATERS, J.H. 1943 A LETHAL EMBRYONIC WING MUTATION IN THE DOMESTIC FOWL JOHEA 34(7), 213-217 OTHER CHICK EMBRYO, MUTANT, MORTALITY, DEFECTIVENESS LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 2975

8204. WATERS, N.F., BYWATERS, J.H. 1943 POULTRY GENETICS AS RELATED TO PATHOLOGY DISEASES OF POULTRY, FIRST EDITION, IOWA STATE UNIVERSITY PRESS, AMES, IOWA, PAGES 41-65 OTHER GENETICS, PATHOLOGY LIB-RP-OK (SF995 .B5) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3004

8205. WATERS, N.F., BYWATERS, J.H. 1943 A STUDY OF BODY WEIGHTS IN NINE DIFFERENT STRAINS OF WHITE LEGHORNS POSCA 22(2), 178-187 OTHER GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1520

8206. WATERS, N.F., BYWATERS, J.H. 1947 PROLAPSE IN THIRTEEN INBRED LINES OF WHITE LEGHORNS POSCA 26(5), 558-558 OTHER GENETICS LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3525

8207. WATERS, N.F., BYWATERS, J.H. 1949 INFLUENCE OF AGE OF CHICKENS AT CONTACT EXPOSURE ON INCIDENCE OF LYMPHOMATOSIS POSCA 28(2), 254-261 L/S AGE, TRANSMISSION EXPERIMENT, LL LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 1641

8208. WATERS, N.F., BYWATERS, J.H. 1952 POULTRY GENETICS AS RELATED TO PATHOLOGY DISEASES OF POULTRY, THIRD EDITION, EDITED BY H.E. BIESTER, L.H. SCHWARTE: IOWA STATE UNIVERSITY PRESS, AMES, IOWA, CHAPTER 3, PAGES 43-69 OTHER GENETICS, PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3529

8209. WATERS, N.F., BYWATERS, J.H. 1959 POULTRY GENETICS AS RELATED TO PATHOLOGY DISEASES OF POULTRY, FOURTH EDITION, EDITED BY H.E. BIESTER, L.H. SCHWARTE: IOWA STATE UNIVERSITY PRESS, AMES, IOWA, CHAPTER 3, PAGES 34-52 OTHER GENETICS, PATHOLOGY LIB-RP-BK-OK (SF995 .B5) UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH

Appendix 2

SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3032

8210. WATERS. N.F., FONTES. A.K. 1960 GENETIC RESPONSE OF INBRED LINES OF CHICKENS TO ROUS SARCOMA VIRUS JNCIA 25(2). 351-357 L/S RSV. RESISTANCE - GENETIC LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0251 LL

8211. WATERS. N.F., GROSCHKE. A.C. 1949 THE INFLUENCE OF DIET ON EARLY MORTALITY AMONG DIFFERENT LINES OF WHITE LEGHORNS POSCA 28(5). 784-784 OTHER NUTRITION. MORTALITY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3713

8212. WATERS. N.F., GROSCHKE. A.C., SCOTT. H.M. 1950 INFLUENCE OF DIET ON EARLY MORTALITY AMONG INBRED LINES OF CHICKENS POSCA 29(5). 685-691 OTHER NUTRITION. MORTALITY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0060

8213. WATERS. N.F., LAMBERT. W.V.. 1936 INBREEDING IN THE WHITE LEGHORN FOWL IOWA STATE COLLEGE OF AGRICULTURE RESEARCH BULLETIN (202) 1-55 OTHER GENETICS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1530

8214. WATERS. N.F., PRICKETT. C.O. 1944 THE DEVELOPMENT OF FAMILIES OF CHICKENS FREE OF LYMPHOMATOSIS POSCA 23(4). 321-333 L/S. HV GENETICS. LL. MD LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1639 LL

8215. WATERS. N.F., PRICKETT. C.O. 1946 TYPES OF LYMPHOMATOSIS AMONG DIFFERENT INBRED LINES OF CHICKENS POSCA 25(4). 415-415 L/S. HV LL. MD. GENETICS. CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3067

8216. WATERS. N.F., PRICKETT. C.O. 1946 TYPES OF LYMPHOMATOSIS AMONG DIFFERENT INBRED LINES OF CHICKENS POSCA 25(5). 501-508 L/S. HV GENETICS. LL. MD. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1640 L

8236. WEBSTER. H.D. 1948 THE RIGHT OVIDUCT IN CHICKENS JAVMA 112. 221-223 OTHER OVIDUCT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3007

8368. WINTON. B. 1942 QUARANTINE AND SANITATION MEASURES EFFECTIVE AT REGIONAL LABORATORY UNITED STATES EGG AND POULTRY MAGAZINE 48. 286-287. 314-315 OTHER REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1539

8369. WINTON. B. 1942 RESEARCH AT U.S. POULTRY LABORATORY MCVTA 3. 17-19. 27 HV. L/S MD. L/S. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1538

8370. WINTON. B. 1944 A 40% KILLER . . . RANGE PARALYSIS HATCHERY TRIBUNE 18. 52 AND 62 HV MD. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1251

8371. WINTON. B. 1946 RESEARCH ON "FOWL PARALYSIS" OR LYMPHOMATOSIS AT THE U.S. REGIONAL POULTRY RESEARCH LABORATORY WPSJA 2. 22-28 HV MD. REVIEW LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1537

8372. WINTON. B. 1948 STUDIES ON LYMPHOMATOSIS AT THE U.S. REGIONAL POULTRY RESEARCH LABORATORY PROCEEDINGS OF THE

EIGHTH WORLD'S POULTRY CONGRESS. 712-719 L/S LL. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1665

8375. WINTON, B., LUCAS, E.H., COTTRAL, G.F. 1950 THE EFFECTS OF FEEDING TOMATOES ON THE INCIDENCE OF LYMPHOMATOSIS IN CHICKENS POSCA 29(6). 912-915 HV MD. NUTRITION. PATHOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3014

8378. WITTER, R.L. 1967 MAINTENANCE OF MAREK'S DISEASE AGENT IN CELL CULTURE PROCEEDINGS OF THE 1967 WESTERN POULTRY DISEASE CONFERENCE. DAVIS. CALIFORNIA. MARCH 20-21. PAGES 22-22 HV MD. CELL CULTURE. TECHNIQUE LIB-RP-ABSTR-BK-OK (SF995 .W48) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3052

8379. WITTER, R.L. 1968 VIRAL FLORA OF CHICK AND DUCK TISSUE SOURCES - DISCUSSION NCIMA (29). 119-120 HV. L/S. OTHER LL. CELL CULTURE. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0128

8380. WITTER, R.L. 1969 ADVANCES IN KNOWLEDGE OF MAREK'S DISEASE: EPIDEMIOLOGICAL STUDIES RELATING TO THE CONTROL OF MAREK'S DISEASE PROCEEDINGS OF THE FOURTH CONGRESS MEETING OF THE WORLD VETERINARY POULTRY ASSOCIATION. BELGRAD. 267-275 HV MD. CONTROL - IRRADIATION. EPIZOOTIOLOGY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1668

8381. WITTER, R.L. 1970 DIAGNOSIS OF MAREK'S DISEASE - SOME PRACTICAL CONSIDERATIONS PROCEEDINGS OF THE ELEVENTH POULTRY PATHOLOGISTS' CONFERENCE. HOLIDAY INN. TRENTON. NEW JERSEY. NOVEMBER 10-13. 65-66 HV MD. REVIEW. PATHOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1437

8382. WITTER, R.L. 1970 DO EGGS TRANSMIT MAREK'S DISEASE? AGREA 19(3). 12-13 HV MD. TRANSMISSION - CONGENITAL LIB UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1136

8383. WITTER, R.L. 1970 EPIDEMIOLOGICAL STUDIES RELATING TO THE CONTROL OF MAREK'S DISEASE WPSJA 26(4). 755-762 HV MD. EPIZOOTIOLOGY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1597

8384. WITTER, R.L. 1970 SOME FACTS ABOUT MAREK'S DISEASE UNITED STATES DEPARTMENT OF AGRICULTURE ARTICLE 44-216 HV MD. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0851

8385. WITTER, R.L. 1971 CURRENT OUTLOOK FOR MAREK'S DISEASE CONTROL PROCEEDINGS OF THE 19TH WORLD VETERINARY CONGRESS 2. 464-469 HV MD. REVIEW. CONTROL - VACCINATION. CONTROL - ERADICATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2034

8386. WITTER, R.L. 1971 EPIDEMIOLOGY OF MAREK'S DISEASE ONCOGENESIS AND HERPES-TYPE VIRUSES (ABSTRACT OF PAPERS). CAMBRIDGE. ENGLAND. JUNE 20-25. PAGES 15-15 HV MD. EPIZOOTIOLOGY. HVT LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3063

8387. WITTER, R.L. 1971 MAREK'S DISEASE RESEARCH - HISTORY AND PERSPECTIVES POSCA 50(2). 333-342 HV MD. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY.

3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1618

8388. WITTER. R.L. 1972 EPIDEMIOLOGY OF MAREK'S DISEASE - A REVIEW ONCOGENESIS AND HERPESVIRUSES. INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. LYON. FRANCE. SCIENTIFIC PUBLICATIONS (2). 111-122 HV MD. REVIEW LIB-RP-BK-OK (QR361 .I5) UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2524

8389. WITTER. R.L. 1972 TURKEY HERPESVIRUS: LACK OF ONCOGENICITY FOR TURKEYS AVDIA 16(3). 666-670 HV HVT. ONCOGENICITY. TURKEY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2478 MM

8418. WITTER. R.L.. BURGOYNE. G.H. 1967 CYTOPATHIC EFFECT IN CELL CULTURES INOCULATED WITH MAREK'S DISEASE AGENT THE 48TH CONFERENCE OF RESEARCH WORKERS IN ANIMAL DISEASES. CHICAGO. ILLINOIS. NOVEMBER 27-28. NO PAGE NUMBERS GIVEN HV MD. CELL CULTURE. CYTOPATHOLOGY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3050 M

8419. WITTER. R.L.. BURGOYNE. G.H.. BURMESTER. B.R. 1968 SURVIVAL OF MAREK'S DISEASE AGENT IN LITTER AND DROPPINGS AVDIA 12(3). 522-530 HV MD. INACTIVATION - PHYSICOCHEMICAL. LITTER. FECES. MOISTURE ANALYSIS LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0022 MM

8420. WITTER. R.L.. BURGOYNE. G.H.. SOLOMON. J.J. 1968 EVIDENCE FOR A HERPESVIRUS AS THE ETIOLOGICAL AGENT OF MAREK'S DISEASE JAVMA 152. 1350-1350 HV MD. HERPESVIRUS. CELL CULTURE. CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3055 MM

8421. WITTER. R.L.. BURGOYNE. G.H.. SOLOMON. J.J. 1968 PRELIMINARY STUDIES ON CELL CULTURES INFECTED WITH MAREK'S DISEASE AGENT AVDIA 12(1). 169-185 HV MD. CELL CULTURE. LL. BONE MARROW. SPLEEN. LIVER. LUNG. KIDNEY. HEART LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0188

8422. WITTER. R.L.. BURGOYNE. G.H.. SOLOMON. J.J. 1969 EVIDENCE FOR A HERPESVIRUS AS AN ETIOLOGIC AGENT OF MAREK'S DISEASE AVDIA 13(1). 171-184 HV MD. HERPESVIRUS. TRANSMISSION EXPERIMENT. REVIEW LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0280 MM

8423. WITTER. R.L.. BURMESTER. B.R. 1967 TRANSMISSION OF MAREK'S DISEASE WITH ORAL WASHINGS AND FECES FROM INFECTED CHICKENS PSEBA 124. 59-62 HV MD. TRANSMISSION EXPERIMENT. FECES. ORAL WASHING LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0217 M

8424. WITTER. R.L.. BURMESTER. B.R.. BURGOYNE. G.H. 1967 SURVIVAL OF MAREK'S DISEASE AGENT IN LITTER AND DROPPINGS POSCA 46(5). 1339-1339 HV MD. FECES. TRANSMISSION - CONTACT LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3049 M

8425. WITTER. R.L.. CALNEK. B.W.. LEVINE. P.P. 1966 INFLUENCE OF NATURALLY OCCURRING PARENTAL ANTIBODY ON VISCERAL LYMPHOMATOSIS VIRUS INFECTION IN CHICKENS AVDIA 10(1). 43-56 L/S ANTIBODY. LL LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1540 L

8427. WITTER. R.L.. FRANK. H.. LANGE. J.. MOENNIG. V.. HUNSMANN. G.. SCHAFER. W. 1973 APPLICATION OF HEMAGGLUTINATION TO THE ASSAY AND SEROLOGIC CHARACTERIZATION OF MOUSE LEUKEMIA VIRUSES PROCEEDINGS OF THE 73RD ANNUAL MEETING OF THE

Appendix 2

CULTURE. HETEROKARYON. CONTROL - VACCINATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3709

8437. WITTER. R.L.. SHARMA. J.M. TRANSIENT INFECTION AND HETEROKARYON FORMATION IN HAMSTER CELL CULTURES INOCULATED WITH CELL-ASSOCIATED STOCKS OF MAREK'S DISEASE VIRUS AND HERPESVIRUS OF TURKEYS HV MD. HVT. CELL CULTURE. HAMSTER. HETEROKARYON LIB-PRP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3425 M

8438. WITTER. R.L.. SHARMA. J.M.. SOLOMON. J.J.. CHAMPION. L.R. 1973 AN AGE-RELATED RESISTANCE OF CHICKENS TO MAREK'S DISEASE: SOME PRELIMINARY OBSERVATIONS AVIAN PATHOLOGY 2(1). 43-54 HV MD. RESISTANCE - AGE. RESISTANCE - GENETIC. TRANSMISSION - CONTACT. CONTROL - VACCINATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2828 M

8439. WITTER. R.L.. SOLOMON. J.J. 1967 CELL CULTURE STUDIES WITH THE AGENT OF MAREK'S DISEASE PROCEEDINGS OF THE 104TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICINE ASSOCIATION. DALLAS. TEXAS. JULY 9-13. PAGES 137-138 HV MD. CELL CULTURE. TECHNIQUE LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3051

8440. WITTER. R.L.. SOLOMON. J.J. 1971 EPIDEMIOLOGY OF A HERPESVIRUS OF TURKEYS: POSSIBLE SOURCES AND SPREAD OF INFECTION IN TURKEY FLOCKS INFIB 4(4). 356-361 HV HVT. EPIZOOTIOLOGY. TRANSMISSION EXPERIMENT LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1972

8441. WITTER. R.L.. SOLOMON. J.J. 1972 EXPERIMENTAL INFECTION OF TURKEYS AND CHICKENS WITH A HERPESVIRUS OF TURKEYS (HVT) AVDIA 16(1). 34-44 HV HVT. TRANSMISSION EXPERIMENT. TURKEY LIB-RP-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2347

8442. WITTER. R.L.. SOLOMON. J.J. 1972 PROSPECTS FOR THE CONTROL OF MAREK'S DISEASE THROUGH ISOLATION REARING PILSA 5. 163-168 HV MD. FAPP. SPF LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 2768 M

8443. WITTER. R.L.. SOLOMON. J.J.. BURGOYNE. G.H. 1969 CELL CULTURE TECHNIQUES FOR PRIMARY ISOLATION OF MAREK'S DISEASE-ASSOCIATED HERPESVIRUS AVDIA 13(1). 101-118 HV MD. CELL CULTURE. TECHNIQUE. VIRUS ISOLATION LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 0279 MM

8444. WITTER. R.L.. SOLOMON. J.J.. CHAMPION. L.R. 1970 LONG-TERM STUDIES OF MAREK'S DISEASE INFECTION IN INDIVIDUAL CHICKENS THE 107TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICINE ASSOCIATION. LAS VEGAS. NEVADA. JUNE 23-25. PAGES 183-184 HV MD. EPIZOOTIOLOGY LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1669

8445. WITTER. R.L.. SOLOMON. J.J.. CHAMPION. L.R.. NAZERIAN. K. 1971 LONG-TERM STUDIES OF MAREK'S DISEASE INFECTION IN INDIVIDUAL CHICKENS AVDIA 15(2). 346-365 HV MD. EPIZOOTIOLOGY. VIREMIA. ANTIBODY LIB-RP UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 1736 MM

8446. WITTER. R.L.. SOLOMON. J.J.. SHARMA. J.M. 1973 STUDIES ON THE ETIOLOGY OF LEUKOSIS IN TURKEYS: A PROGRESS REPORT PROCEEDINGS OF THE 110TH ANNUAL MEETING OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION. PHILADELPHIA. PENNSYLVANIA. JULY 16-19. PAGES 162-162 HV MD. HVT. CELL CULTURE. VIRUS ISOLATION LIB-RP-ABSTR-OK UNITED STATES DEPARTMENT OF AGRICULTURE. AGRICULTURAL RESEARCH SERVICE. REGIONAL POULTRY RESEARCH LABORATORY. 3606 EAST MOUNT HOPE ROAD. EAST LANSING. MI 48823 3704

Appendix

Mi

8447. WITTER, R.L., SOLOMON, J.J., SHARMA, J.M. RESPONSE OF TURKEYS TO INFECTION WITH VIRULENT MAREK'S DISEASE VIRUSES OF TURKEY AND CHICKEN ORIGIN HV MD, HVT, ONCOGENESIS, CONTROL - VACCINATION, PATHOLOGY, IMMUNE RESPONSE LIB-PRP
UNITED STATES DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, REGIONAL POULTRY RESEARCH LABORATORY, 3606 EAST MOUNT HOPE ROAD, EAST LANSING, MI 48823 3288

472 CITATIONS SATISFY THE SEARCH REQUEST.

8681 CITATIONS WERE SEARCHED.

Appendix 2

```
INPUT CARD.:./WRITE TAPE/

IDENTIFICATION OF OUTPUT TAPE
AVIAN TUMORS & TUMOR VIRUSES. USDA. ARS. REGIONAL POULTRY RESEARCH LAB. E. LANSING. MICH. 48823
FIELDS ARE  AUTH  DATE  TITL  PUB   CAT   KEY   LOC   ADD   NUMB  DUM1
THE DESCRIPTOR FIELD`IS  KEY
```

```
END OF SEARCHING.

                     XXXXX    X     X                     XXXXX    X     X                     XXXXX    X     X
                    X     X   X   X                      X     X   X   X                      X     X   X   X
                    X     X   X X                        X     X   X X                        X     X   X X
                    X     X   X                          X     X   X                          X     X   X
                    X     X   X X                        X     X   X X                        X     X   X X
                    X     X   X   X                      X     X   X   X                      X     X   X   X
                     XXXXX    X     X                     XXXXX    X     X                     XXXXX    X     X
```

Appendix 2

Appendix 2

```
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX


  MACHINE NO.      OPERATOR      SHIFT      DATE(MMDD)        COST CENTER        START TIME        STOP TIME


  REEL NO.         FILE          FILE ID.   F0131


  NO. OF PAGES PRINTED   49

  NO. OF LINES PRINTED   2496

  NO. OF COPIES   1

  NO. OF ABORTED PAGES   2           NO. OF OVERPRINT LINES   0

  JOB REQUEST NO.   02     COLLATE MODE:  YES     FORMS OVERLAY MODE:  OFF     FILE MODE:  SINGLE

  NO. OF VOLUMES PROCESSED   1

  TAPE PHYSICAL BLOCK COUNT   2479

  NO. OF TAPE PHYSICAL BLKS SKIP   0

  END-OF-REPORT STATUS DISPLAY   113


XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX XEROX
```

Appendix 3

Honors and Awards to ARS Scientists while at the Regional Poultry Research Laboratory, East Lansing, Michigan and the Animal Physiology and Genetics Institute, Beltsville, Maryland

Regional Poultry Research Laboratory Team

1972 - USDA Distinguished Service Award, "for outstanding research on Marek's disease (avian leukosis) resulting in a highly efficient, safe vaccine for controlling a disease which has cost the poultry industry $200 million annually." Presented by the Secretary of Agriculture, Earl L. Butz.

Ben Roy Burmester

1957 - Received Superior Service Award. Granted by the U.S. Department of Agriculture.

1957 - Received Borden Award. Granted by the Poultry Science Association.

1963 - Elected Fellow of Poultry Science Association "for distinguished services."

1963 - Senior Sigma Xi Award for Meritorious Research by Michigan State University Chapter.

1964 - Charter Diplomate, American College of Veterinary Microbiology.

1965 - Elected Fellow of the American Academy of Microbiology.

1966 - Certificate of Merit for Outstanding Performance, U.S. Department of Agriculture.

1970 - U.S. Department of Agriculture Superior Service Award.

1971 - American Poultry Hatchery Federation Award for outstanding research achievement.

1971 - U.S. Department of Agriculture Certificate of Merit for Outstanding performance as Director of research on the avian leukosis complex, especially Marek's disease.

1971 - Michigan State University College of Veterinary Medicine Alumni Award in recognition of outstanding service to the veterinary profession.

1972 - U.S. Department of Agriculture Certificate of Merit for outstanding leadership and research participation with the team which was responsible for the development of a vaccine to control Marek's disease.

1973 - Edward W. Browning Award presented by the American Society of Agronomy for outstanding achievement in the improvement of food sources anywhere in the world.

1974 - Elected Fellow of the Deutsche Akademie der Naturforscher Leopoldina.

1974 - American Feed Manufacturers Award sponsored by the American Veterinary Medical Association for leadership of a team of scientists at the Regional Poultry Research Laboratory that developed a highly effective vaccine against Marek's disease of chickens. The award consisted of a plaque and $1,000.

1974 - Elected a "Knight of Mark Twain" by the Mark Twain Journal, Kirkwood, Missouri in recognition of outstanding contribution to Modern Medical Science, in succession to the late Sir Alexander Fleming.

1975 - U. S. Department of Agriculture Distinguished Service Award.

Lyman B. Crittenden

1965 - U.S. Department of Agriculture Incentive Award.

1965-68 - Appointment as Associate Professor, Zoology Department, Michigan State University.

Lucy F. Lee

1970 - Elected to Sigma Xi.

Keyvan Nazerian

1965 - Elected to Sigma Xi.

William Okazaki

1957 - Elected to the Society of Sigma Xi.

1970 - Best Paper Award, Avian Diseases, Plaque plus $100 cash award.

1971 - Distinguished Service Citation and Plaque from the Michigan Allied Poultry Industries, Inc., "in recognition of outstanding service to Michigan's poultry industry."

William Okazaki (cont'd)

1972 - Plaque from American Poultry and Hatchery Federation-Poultry and Egg Institute of America, "in recognition for research work in the development of a Marek's disease vaccine for poultry flocks."

1973 - Tom Newman Memorial Award presented annually by the Poultry Stock Association of Great Britain for outstanding contribution to world poultry husbandry research reported in scientific papers during the year. The award consists of a medal and $120 honorarium presented jointly to Dr. Purchase and Dr. Okazaki in the House of Commons, London, England.

1975 - Award from Japanese Science & Technology Agency for travel to Japan from June 1 through December 31, 1975.

H. Graham Purchase

1971 - Distinguished Service Citation and Plaque from the Michigan Allied Poultry Industries, Inc., "in recognition of outstanding service to Michigan's poultry industry."

1971 - Plaque from American Poultry and Hatchery Federation-Poultry and Egg Institute of America in recognition of research work in the development of a Marek's disease vaccine for poultry flocks.

1971 - CPC International Award of one thousand five hundred dollars, provided by the Corn Products Company, is given as an achievement award for distinctive contributions to poultry science advancement covering a period of not more than seven years preceding the annual award.

1972 - Arthur Fleming Award presented to the "ten most outstanding young men and women in the Federal Service."

1972 - Sigma Xi Junior Research Award presented by the Michigan State University Chapter for meritorious research in Microbiology.

1973 - Tom Newman Memorial Award presented annually by the Poultry Stock Association of Great Britain for outstanding contribution to world poultry husbandry research reported in scientific papers during the year. The award consists of a medal and $120 honorarium presented jointly to Dr. Purchase and Dr. Okazaki in the House of Commons, London, England.

Jagdev M. Sharma

1968 - Elected to Phi Zeta.

1972 - Elected to Sigma Xi.

Appendix 3

John J. Solomon

1959 - Member, Pi Mu Epsilon Mathematics Honorary Society

1960 - Elected to Sigma Xi

Richard L. Witter

1967 - Avian Pathology Research Award, awarded by the American Association of Avian Pathologists Research Paper Award Committee to the senior author of the paper judged best of those published in AVIAN DISEASES during 1966.

1970 - Poultry Science Association Research Award, 1971, for research judged best of that published in the area of poultry science during 1970.

1971 - Plaque from American Poultry and Hatchery Federation-Poultry and Egg Institute of America, 1971, for role in development of vaccine for Marek's disease.

1975 - Junior Research Award of the Society of Sigma Xi, Michigan State University.

JUN 1